# SCHEMATIC DIAGRAM

## MODEL : 32WL56P/37WL56P

**WARNING** : BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" ON PAGE 3 OF THIS MANUAL.

**CAUTION** : The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the SERVICE SAFETY PRECAUTIONS on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

**NOTE:**

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt  1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt  10W = Cement of 10 watt
   K = ±10%  G = ±2%  F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in $\mu$F, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   —|+|— Electolytic capacitor  —|M|— Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

## ■ SCHEMATIC DIAGRAM STRUCTURE:


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- HDMI Rx#3 (PWR,Audio) [SHEET-304] ..... 19/49
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- OCM MEMORY I/F [SHEET-401] ..... 27/49
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- AUDIO
  - (1/2) [SHEET-600] ..... 38/49
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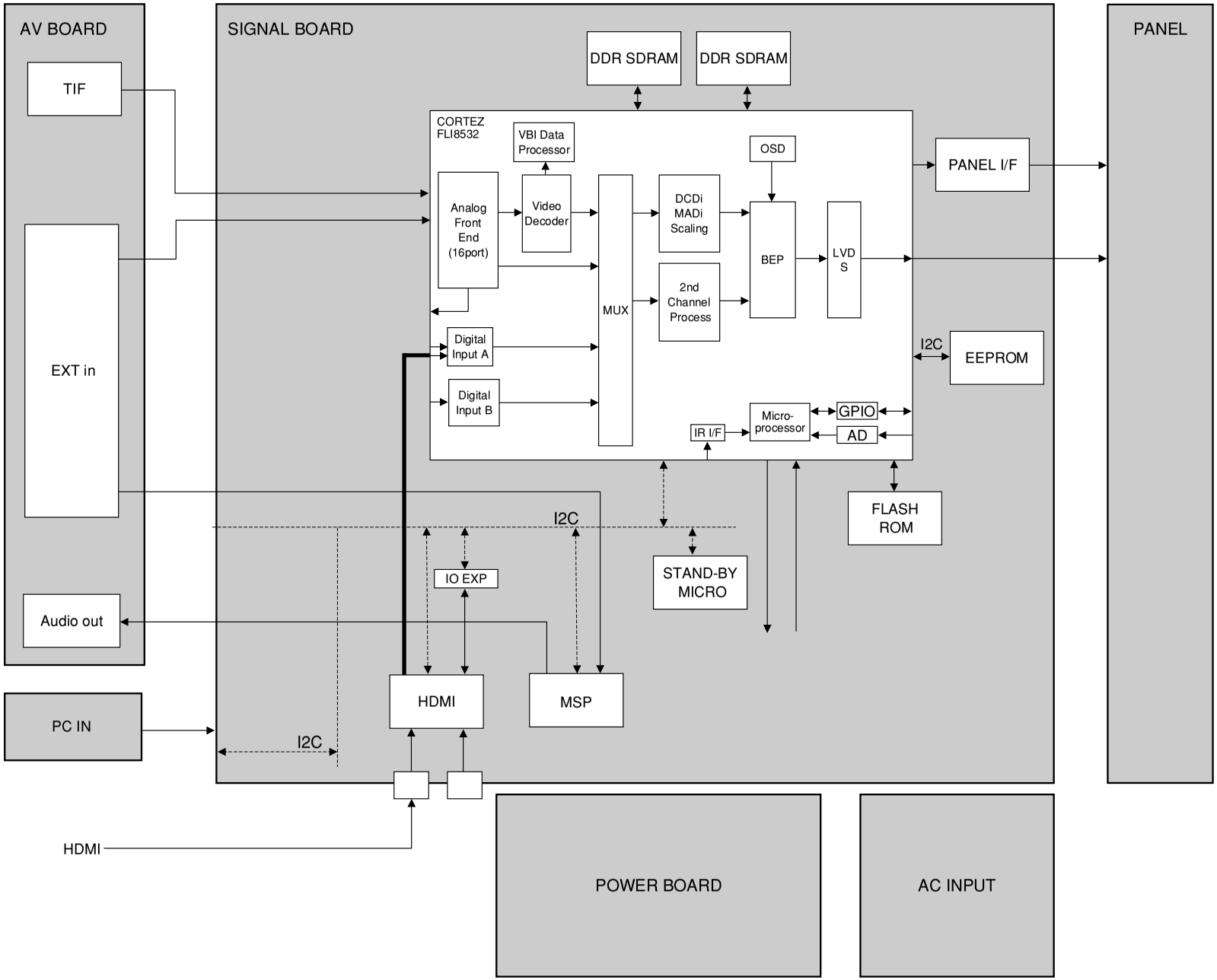
# CIRCUIT BLOCK DIAGRAM



TO SIGNAL BOARD

PJ21A

PLUG_2mm_3P\B3B-PH-K-S

PJ22A

9637S-50ATL FFC/FPC SOCKET

PJ60A

9637S-50ATL FFC/FPC SOCKET

TO VIDEO3 BOARD

PV25A

B11B-PH-K-S

TO PC-IN BOARD

P902

B5B-PH-K-S

P900

B9B-PH-K-S

TO AV-HDD

PJ87A

PLUG_2mm_2P\B2B-PH-K-S

TO FAN-2

P819

KETSU

TO FAN-1

P818

KETSU

TO DIGITAL BOARD

PJ63A

PLUG_2mm_5P\B5B-PH-K-S

TO LED_HP BOARD

P602A

PLUG_2mm_4P\B4B-PH-K-S

TO POWER BOARD

P803B

PLUG_2mm_12P\B12B-PH-K-S

32WL56P/37WL56P
CONNECTOR

## E1

| | |
|---|---|
| 21 | SHIELD GND |
| 20 | CVBS IN |
| 19 | VIDEO OUT |
| 18 | CVBS IN RETURN |
| 17 | VIDEO OUT RETURN |
| 16 | FAST BLANKING |
| 15 | RED IN |
| 14 | BLANKING RETURN |
| 13 | RED RETURN |
| 12 | NC |
| 11 | GREEN IN |
| 10 | NC |
| 9 | GREEN RETURN |
| 8 | SLOW SWITCHING |
| 7 | BLUE IN |
| 6 | AUDIO IN(L) |
| 5 | BLUE RETURN |
| 4 | AUDIO EARTH |
| 3 | AUDIO OUT(L) |
| 2 | AUDIO IN(R) |
| 1 | AUDIO OUT(R) |

## E2

| | |
|---|---|
| 21 | SHIELD GND |
| 20 | CVBS/SY IN |
| 19 | VIDEO OUT |
| 18 | CVBS/SY IN RETURN |
| 17 | VIDEO OUT RETURN |
| 16 | FAST BLANKING |
| 15 | RED/SC IN |
| 14 | BLANKING RETURN |
| 13 | RED/SC RETURN |
| 12 | NC |
| 11 | (GREEN IN) |
| 10 | NC |
| 9 | (GREEN RETURN) |
| 8 | SLOW SWITCHING |
| 7 | (BLUE IN) |
| 6 | AUDIO IN(L) |
| 5 | (BLUE RETURN) |
| 4 | AUDIO EARTH |
| 3 | AUDIO OUT(L) |
| 2 | AUDIO IN(R) |
| 1 | AUDIO OUT(R) |

PC/HDMI_AUDIO

MONITOR_OUT

32WL56P/37WL56P
AV_JACK

ENG37A06GF
H001

GR612 KETSU
GR112 KETSU
tuner_GND
GR613 KETSU
GR113 OPEN
tuner_GND

TIF Type : Horizontal

1.5V (RECEIVING THE SIGNAL)
2.9V (NO SIGTNAL)

TUNER-GND

P516A KETSU

C101 B25V0.01
C110 OPEN
C111 OPEN
C112 KETSU
C113 KETSU
C114 OPEN
C115 OPEN
C116 KETSU
C103 B100p

R101 OPEN
R102 OPEN
C107 OPEN
L191 TEM2121M
C190 0.1uF

L103 TEM2121M
L102 TEM2121M
D101 KETSU
R108 RM73B1HR00CD
R107 RM73B1HR00CD
L101 220u
C102 10V470 105℃
C105 10V470 105℃
L110 KETSU
GR01 RM73B1HR00CD

Q101 2SC4081-Q
R103 100
R104 10k
R105 27k

SCL1
SDA1

Q102 OPEN
R112 OPEN
R115 KETSU
C119 OPEN
R111 OPEN
C108 OPEN
R114 SHORT
R113 OPEN

TP-12
PK05 KETSU

_SW2

R165 KETSU
R163 KETSU
C164 0.01
R168 KETSU
Q162 KETSU
C161 KETSU
Q161 KETSU
R166 KETSU
R161 KETSU
C163 KETSU
R162 KETSU
R164 KETSU
RM73B1HR00JD
R169

SIF OUT
C162 100p
R170 6.8k

(23103272Q)

RT07 820
LT01 100u
CT03 OPEN
RT09 470
CT05 B6.3V10uF
RT04 1k
RT05 100
QT02 2SC4081-Q
CT04 150p
QT03 2SA1576A
RT03 68k
GT01 CHIP JP
RT08 150
RT06 390
CT02 OPEN
QT01 2SA1576A
CT06 B6.3V10uF
RT01 100
RT02 27k
CT01 B6.3V10uF
CT07 B6.3V10uF

QT04 MM1501XNRE
IN1 GND IN2
SW OUT VCC

CT09 B25V0.01
CT08 25V0.1
RT12 1k
RT10 100
RT11 470
QT05 2SA1576A
GND
L105 KETSU
GR02 SHORT
GR03 SHORT
V_TV
V TV
GND
10-A1

1-B5
TXT SW
GT02 CHIP JP
QT06 DTC144EUA

GR05 OPEN
GR07 KETSU
GR08 KETSU
GR06 OPEN
C117 KETSU
C118 KETSU
SYS_SW2
SYS SW2 1-B8
SYS_SW1
SYS SW1 1-B8

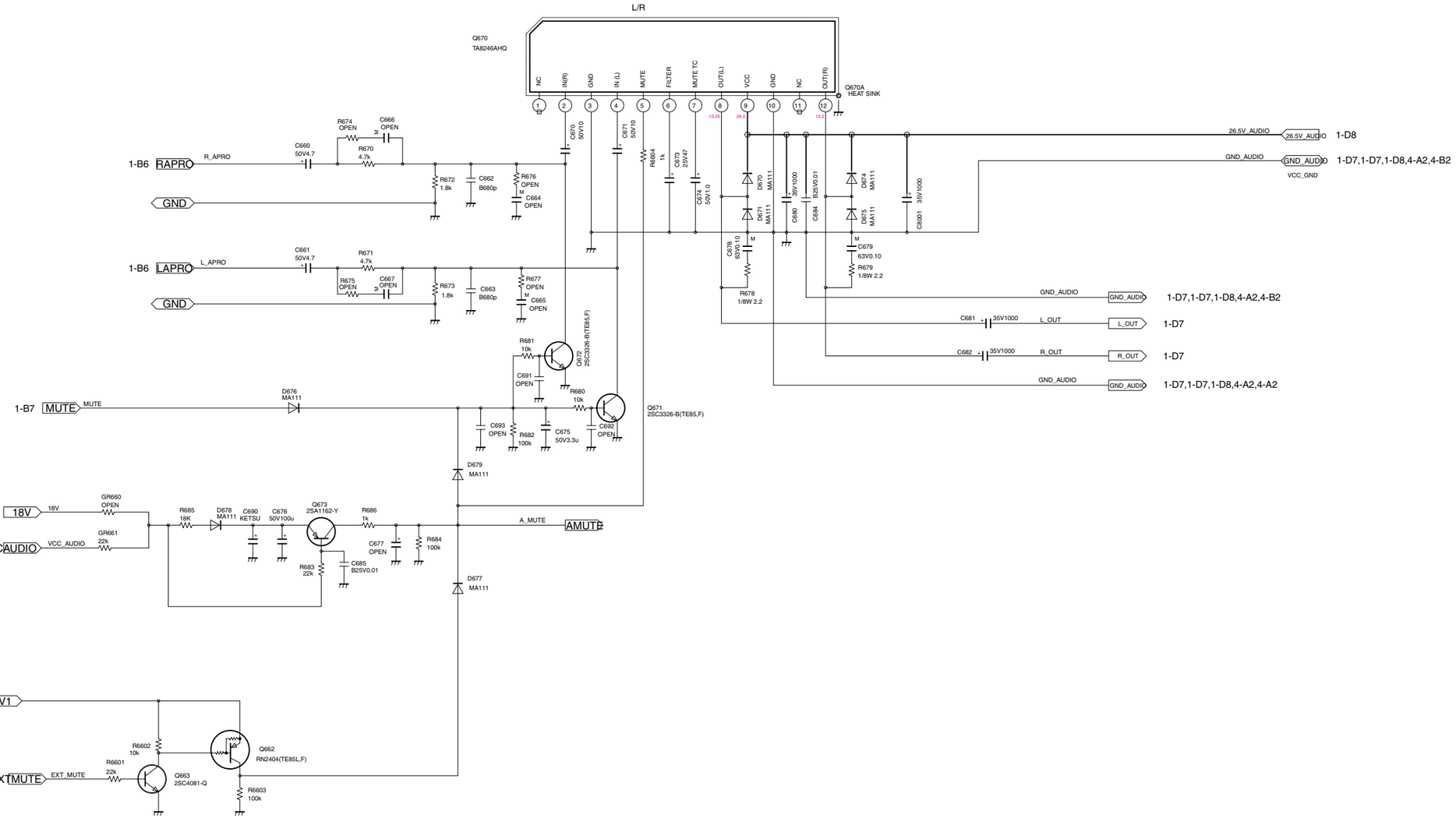
GND
SIF
GND
3-A2

1-B2,2-A1,3-C2,8-E1 SCL1
1-B2,2-A1,3-C2,8-E1 SDA1
GND
GND
1-B6,2-A1,9-A1 5V2
1-A6 32V

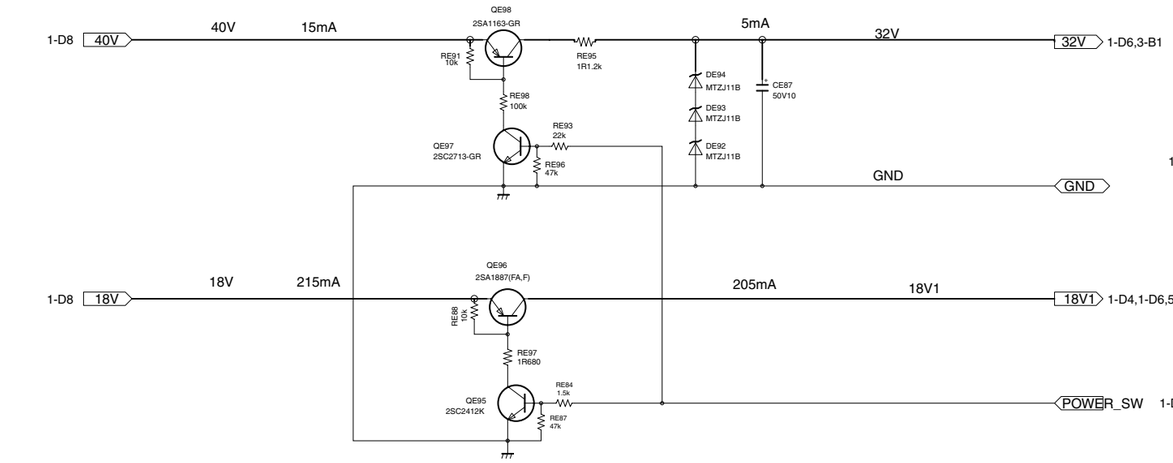
SCL1
SDA1
32V
32V
C104 50V4.7

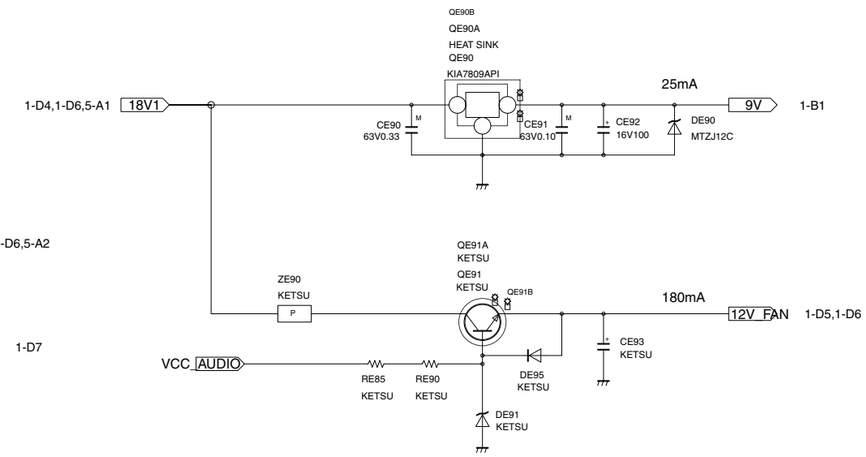
AFT1
AFT1 1-C2

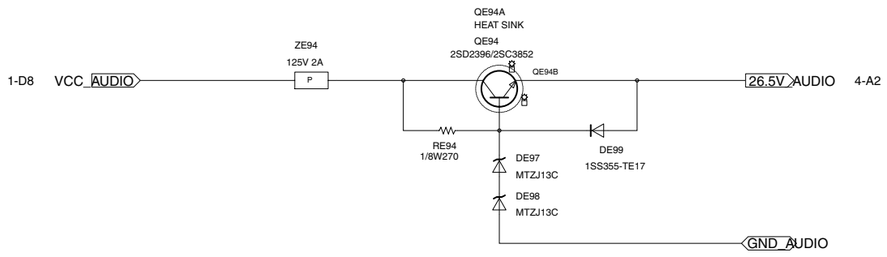
32WL56P/37WL56P
TIF



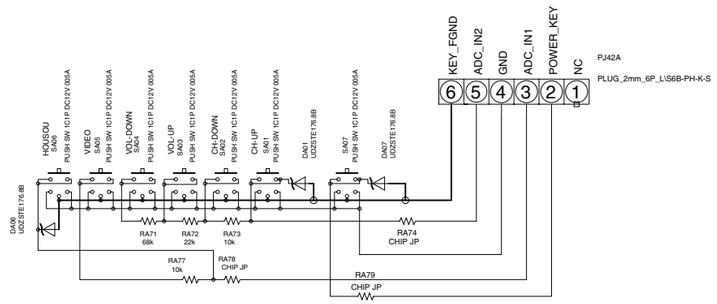

32WL56P/37WL56P
AUDIO_OUT



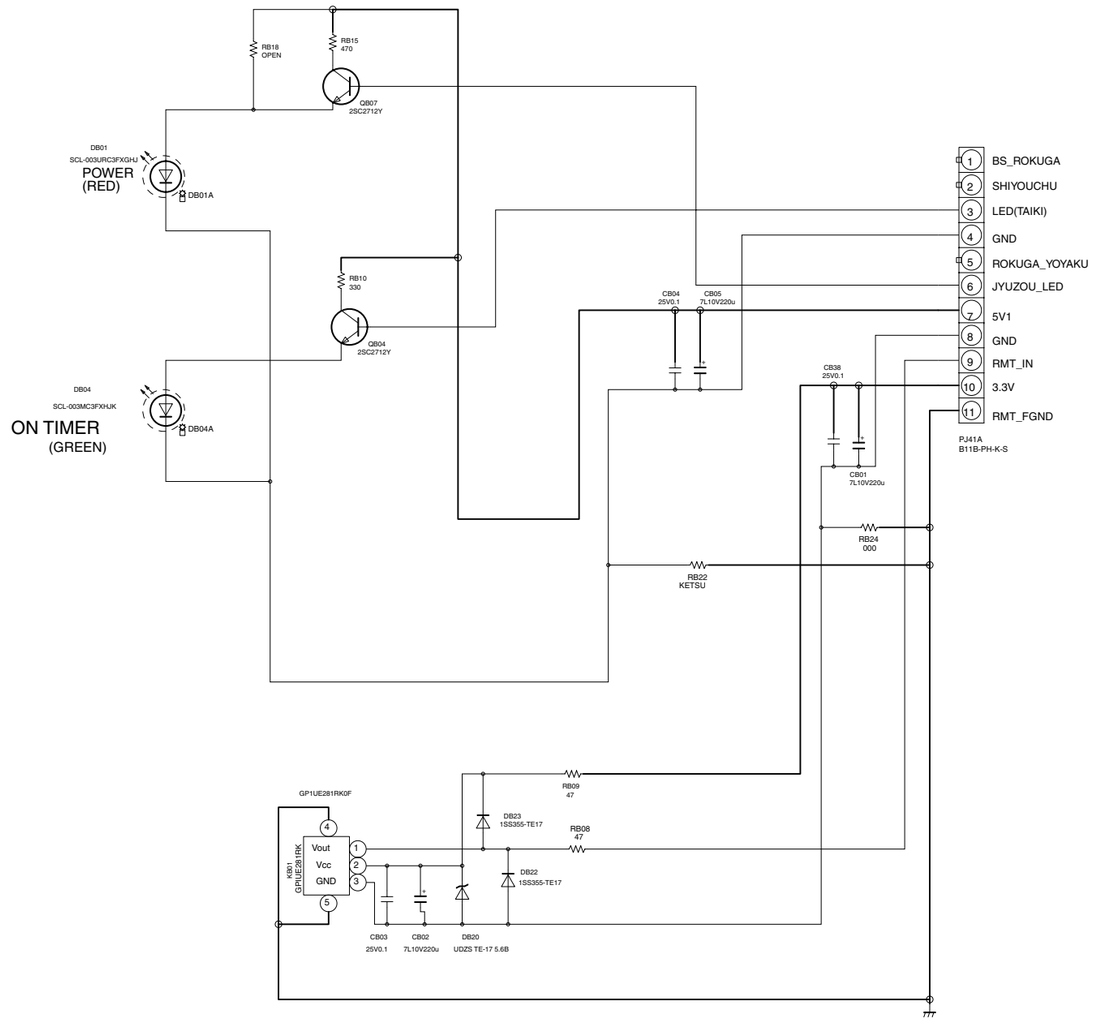



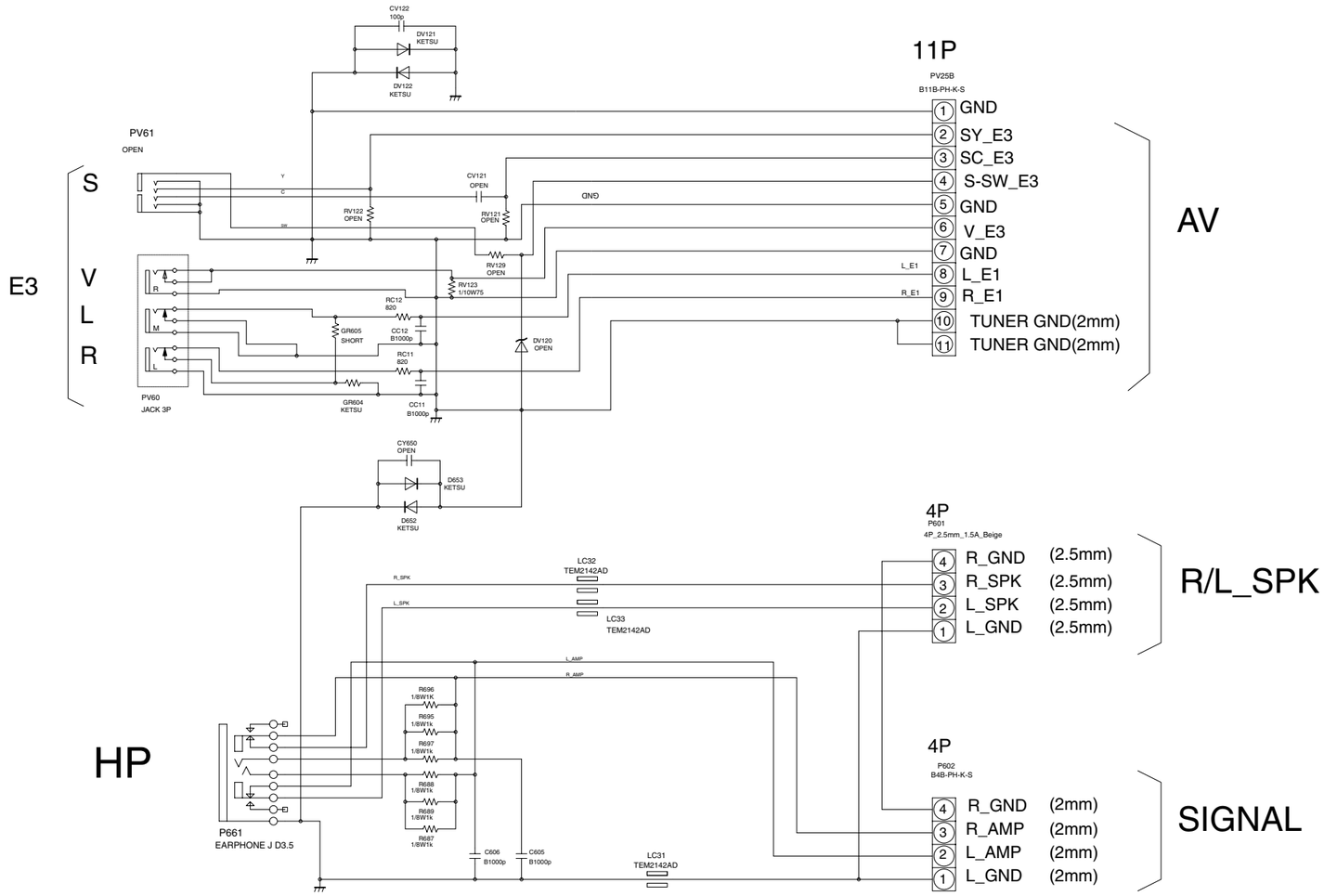

32WL56P/37WL56P
REGULATOR




32WL56P/37WL56P
KEY

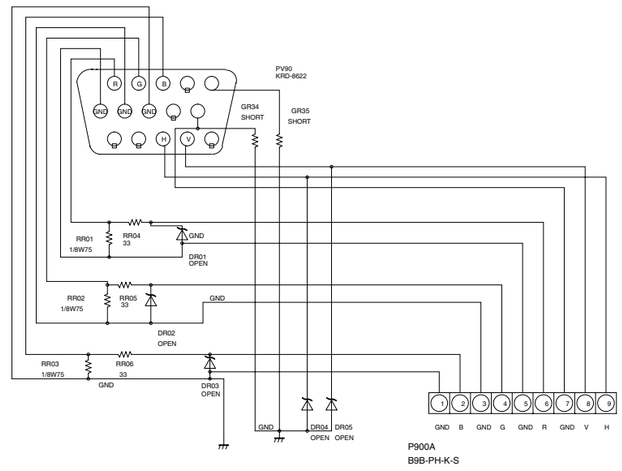


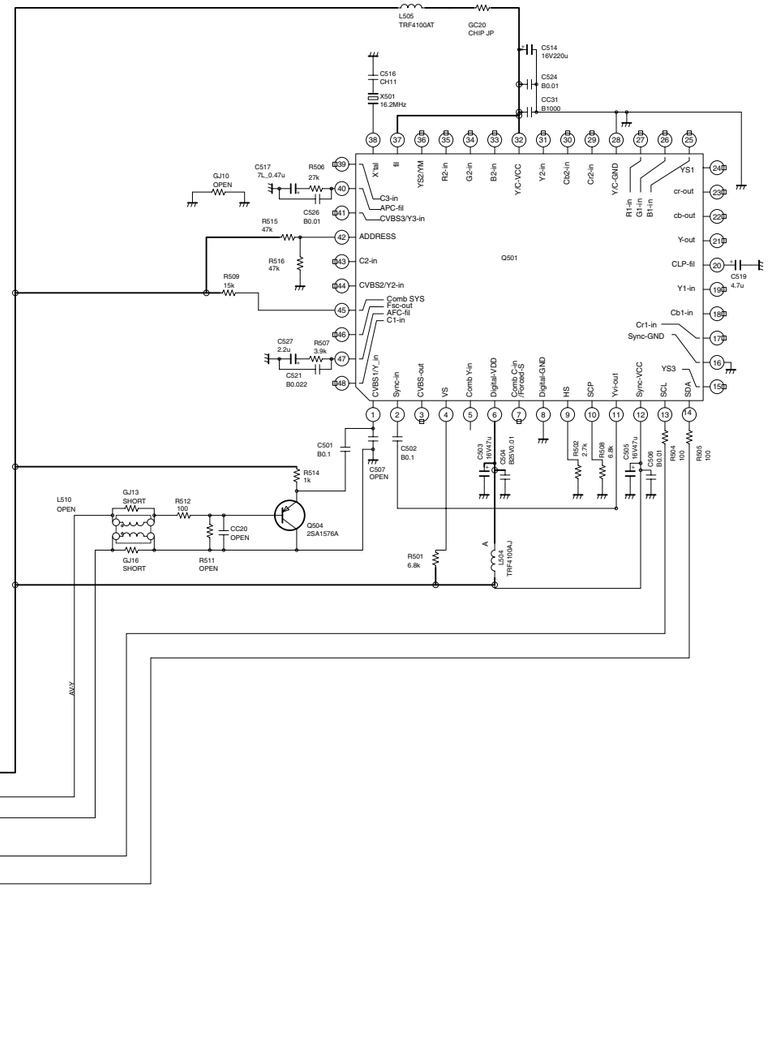

32WL56P/37WL56P
LED_RMT



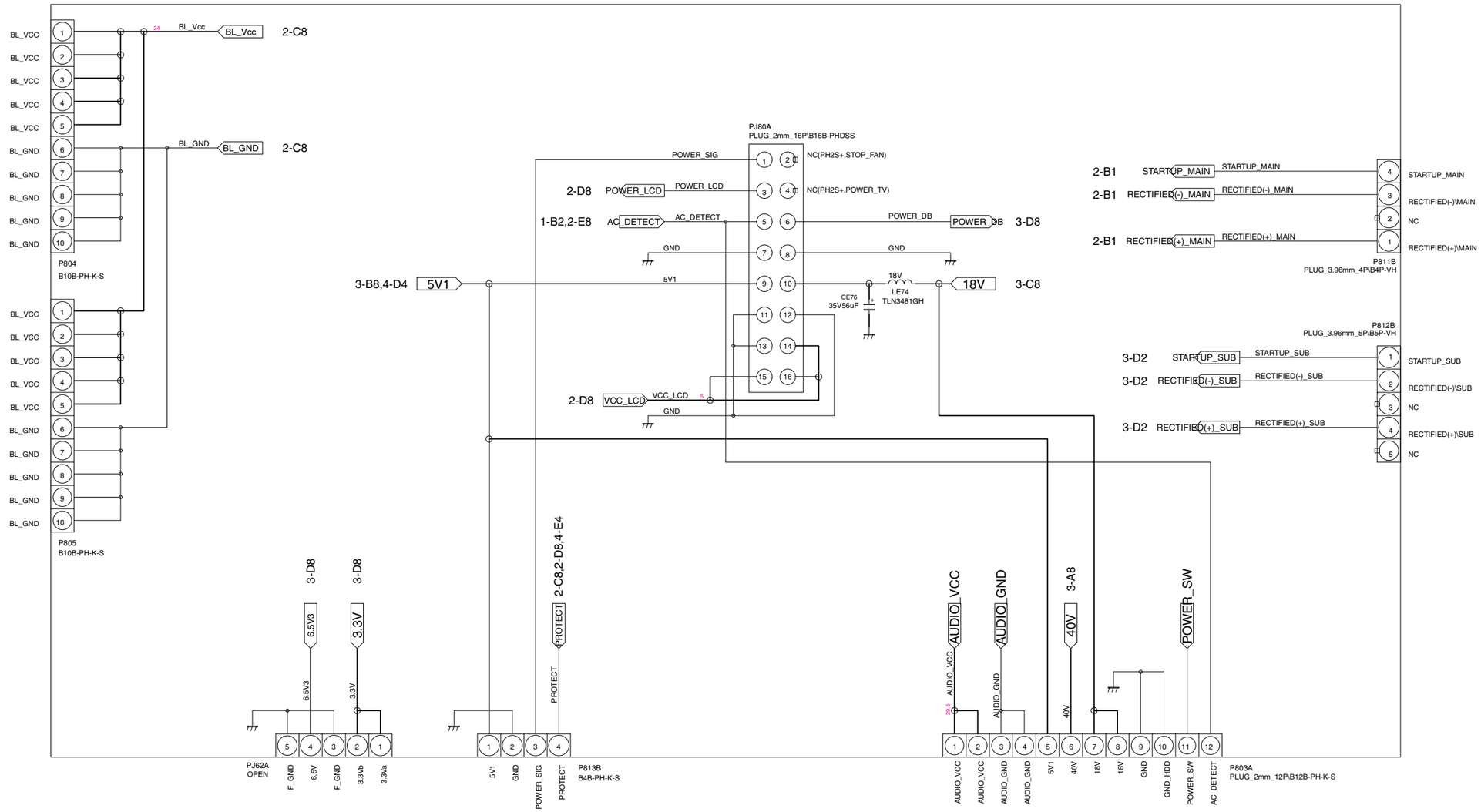

32WL56P/37WL56P
FRONT-AV

PC-DSUB

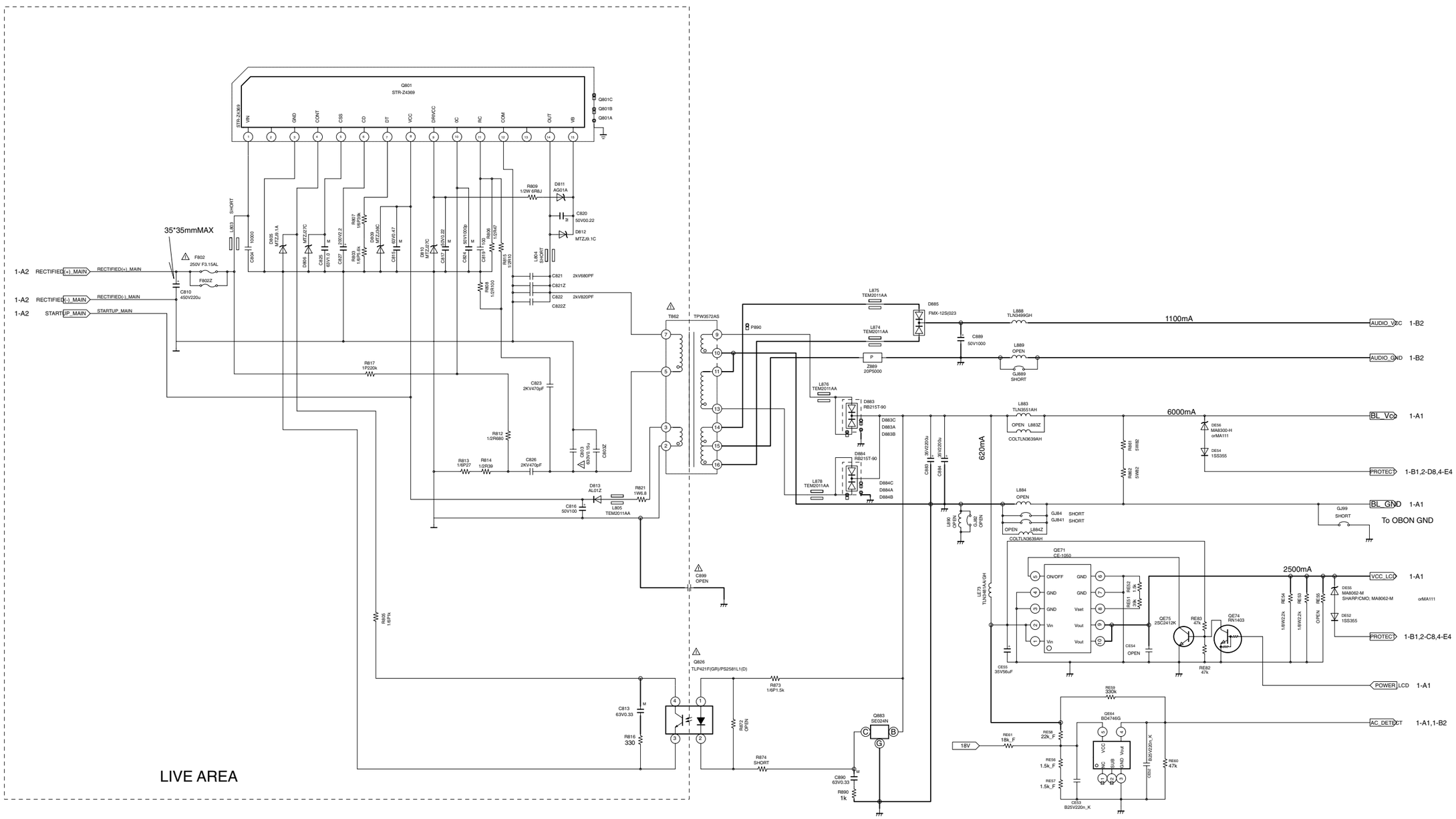


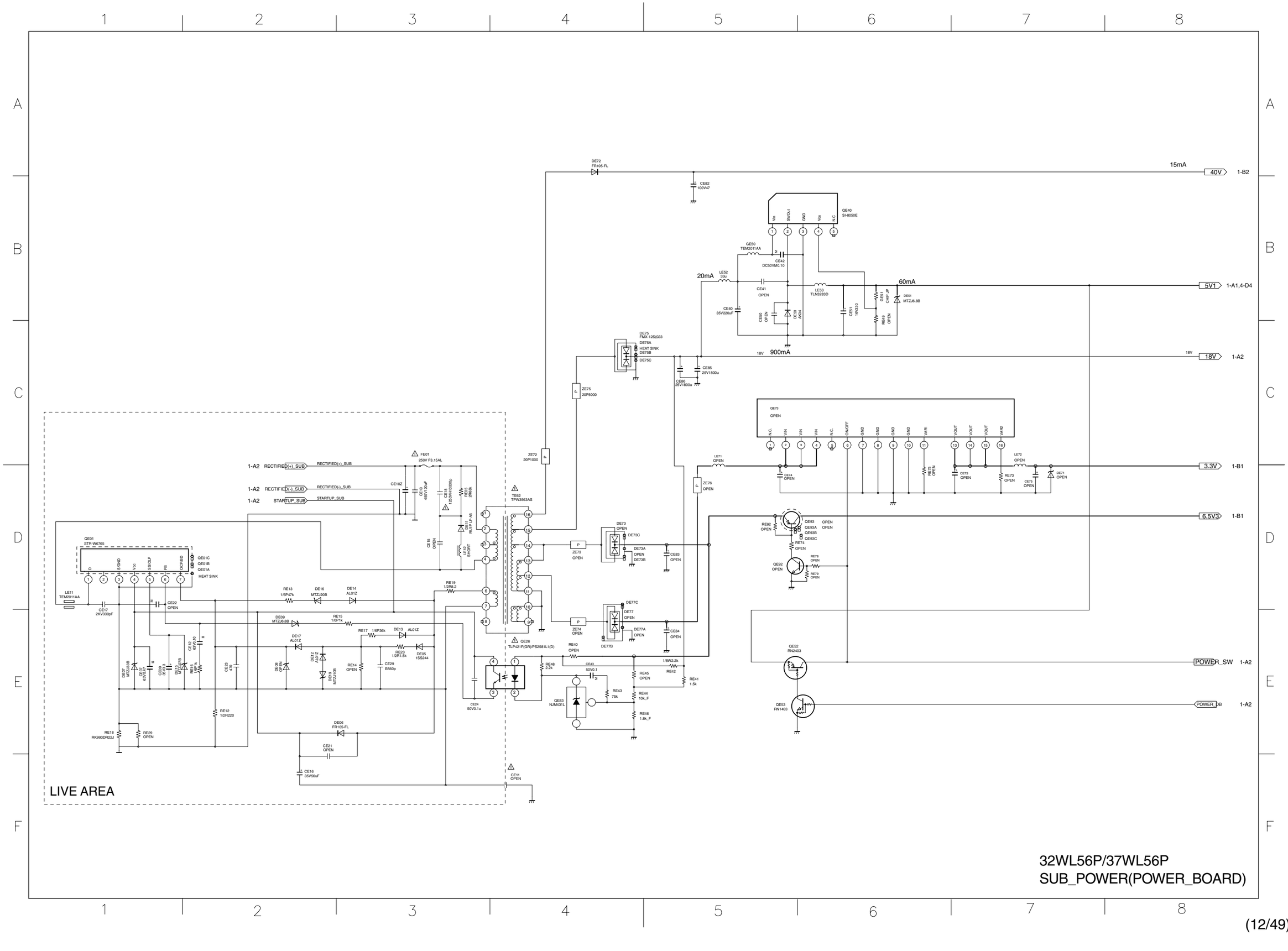

32WL56P/37WL56P
PC-IN_BOARD

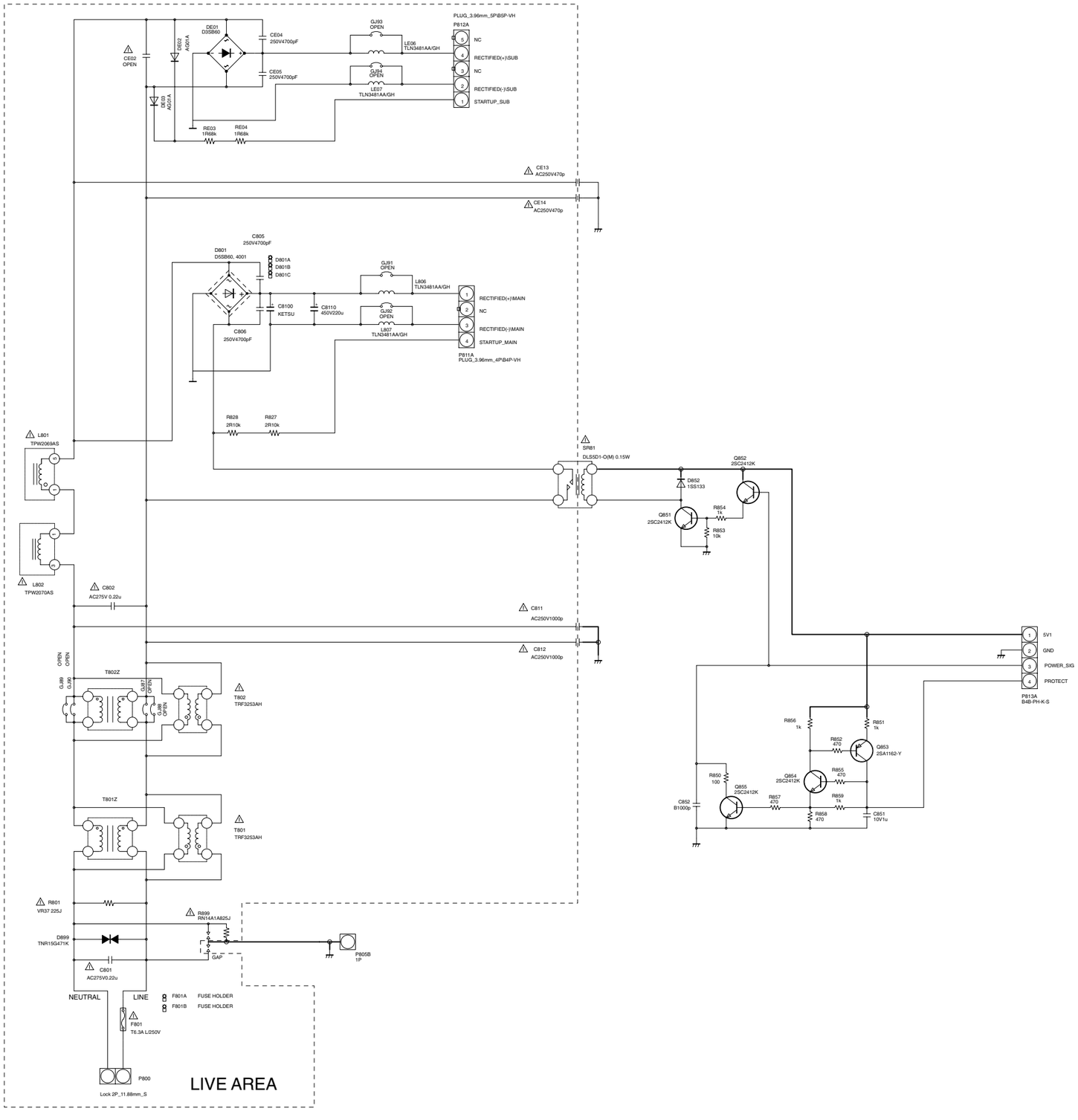



32WL56P/37WL56P
CONNECTOR(POWER_BOARD)

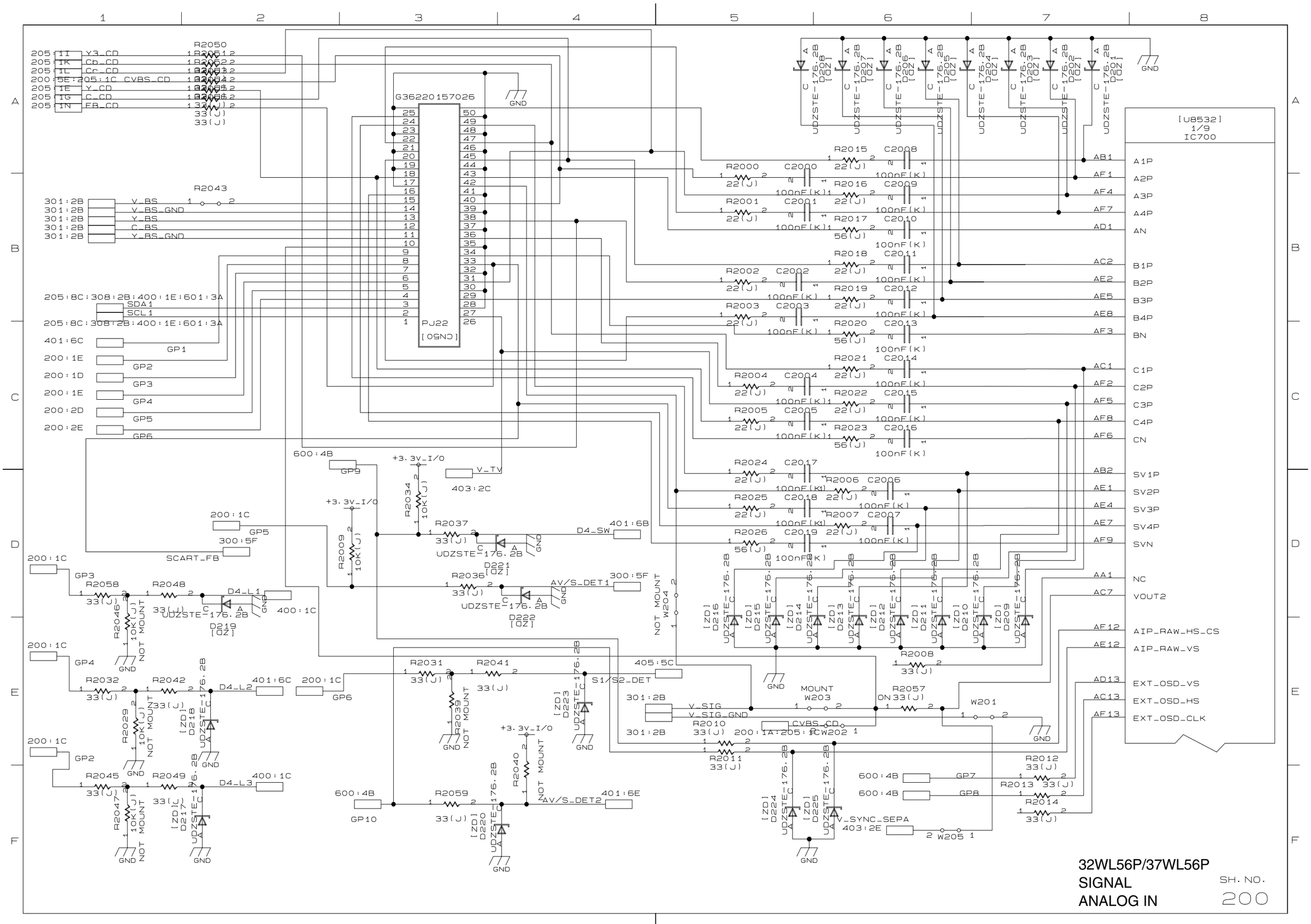



32WL56P/37WL56P
MAIN_POWER(POWER_BOARD)


DE72
FR105-FL
CE82
100V47
15mA
40V
1-B2
QE40
SI-8050E
Vin
SWOut
GND
Vss
N.C.
QE50
TEM2011AA
CE42
DC50VM0.10
20mA
LE52
33u
CE41
OPEN
LE53
TLN3283D
60mA
5V1
1-A1,4-D4
DE51
MTZJ6.8B
GE51
CHIP JP
CE40
35V220uF
CE50
OPEN
DE50
AK40
CE51
1W330
RE49
OPEN
DE75
PMX-12S(023
DE75A
HEAT SINK
DE75B
DE75C
18V
900mA
18V
1-A2
CE85
25V1800u
CE86
25V1800u
ZE75
20P5000
QE73
OPEN
N.C.
VIN
VIN
VIN
N.C.
ON/OFF
GND
GND
GND
GND
VARI
VOUT
VOUT
VOUT
VARI
LE71
OPEN
CE74
OPEN
ZE76
OPEN
LE72
OPEN
CE73
OPEN
RE73
OPEN
DE71
OPEN
RE75
OPEN
3.3V
1-B1
6.5V3
1-B1
RE92
OPEN
QE93
OPEN
QE93A
OPEN
QE93B
QE93C
RE74
OPEN
QE92
OPEN
RE78
OPEN
RE79
OPEN
QE52
RN2403
QE53
RN1403
POWER_SW
1-A2
POWER_DB
1-A2
FE01
250V F3.15AL
1-A2
RECTIFIED(+)_SUB
RECTIFIED(+)_SUB
1-A2
RECTIFIED(-)_SUB
RECTIFIED(-)_SUB
1-A2
STARTUP_SUB
STARTUP_SUB
CE10Z
CE10
450V120uF
CE15
OPEN
DE11
RU1F-LF-A5
LE12
SHORT
RE53
2R68k
TE62
TPW3563AS
ZE72
20P1000
ZE73
OPEN
ZE74
OPEN
DE73
OPEN
DE73C
DE73A
OPEN
DE73B
DE77C
DE77
OPEN
DE77A
OPEN
DE77B
CE83
OPEN
CE84
OPEN
QE26
TLP421F(GR)/PS2581L1(D)
RE40
OPEN
RE48
2.2k
CE43
50V0.1
QE83
NJM431L
RE43
75k
RE45
OPEN
RE44
10k_F
RE46
1.8k_F
1/8W2.2k
RE42
RE41
1.5k
CE24
50V0.1u
QE01
STR-W6765
D
S/GND
Vcc
S/SOUP
FB
OUT/BID
QE01C
QE01B
QE01A
HEAT SINK
LE11
TEM2011AA
CE17
2KV330pF
CE22
OPEN
RE13
1/6P47k
DE16
MTZJ20B
DE14
AL01Z
RE19
1/2R8.2
DE09
MTZJ6.8B
RE15
1/6P1k
RE17
1/6P36k
DE13
AL01Z
DE17
AL01Z
RE23
1/2R1.5k
DE05
1SS244
DE08
DE12
AL01Z
DE10
MTZJ11B
RE14
OPEN
CE29
B560p
DE07
MTZJ33B
CE27
6.8V33
DE03
3.3V
DE15
MTZJ27B
RE11
1.5k
CE19
63V0.10
CE23
470
RE12
1/2R220
RE18
RK993DR22J
RE29
OPEN
DE06
FR105-FL
CE21
OPEN
CE16
35V56uF
CE11
OPEN
LIVE AREA
32WL56P/37WL56P
SUB_POWER(POWER_BOARD)
(12/49)




32WL56P/37WL56P
AC_INPUT


[U8532]
1/9
IC700
G36220157026
PJ22
[CN50]
GND
R2050
R2043
R2000
C2000
R2001
C2001
R2002
C2002
R2003
C2003
R2004
C2004
R2005
C2005
R2006
C2006
R2007
C2007
R2008
R2009
R2010
R2011
R2012
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R2014
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C2010
R2018
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R2019
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C2018
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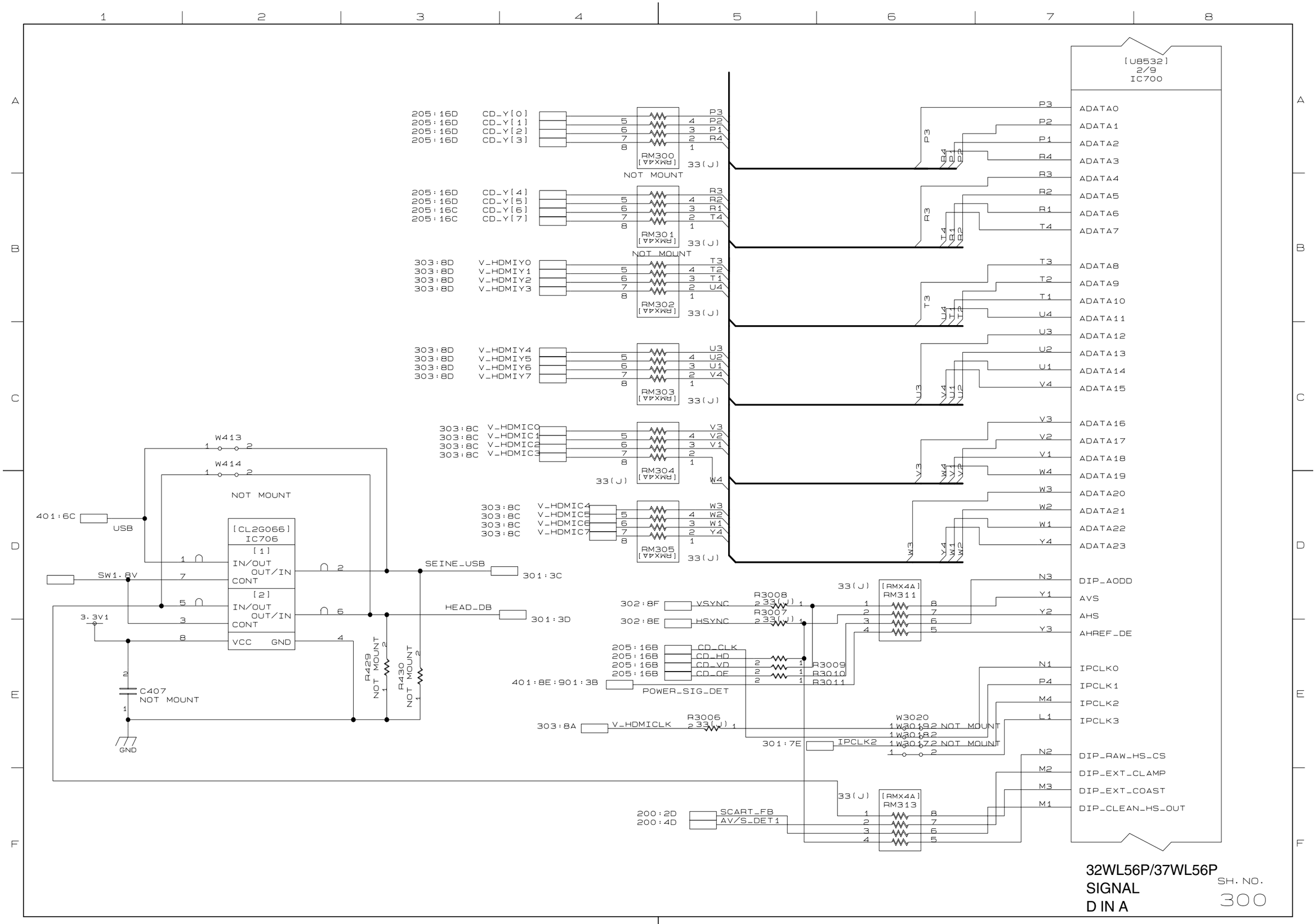
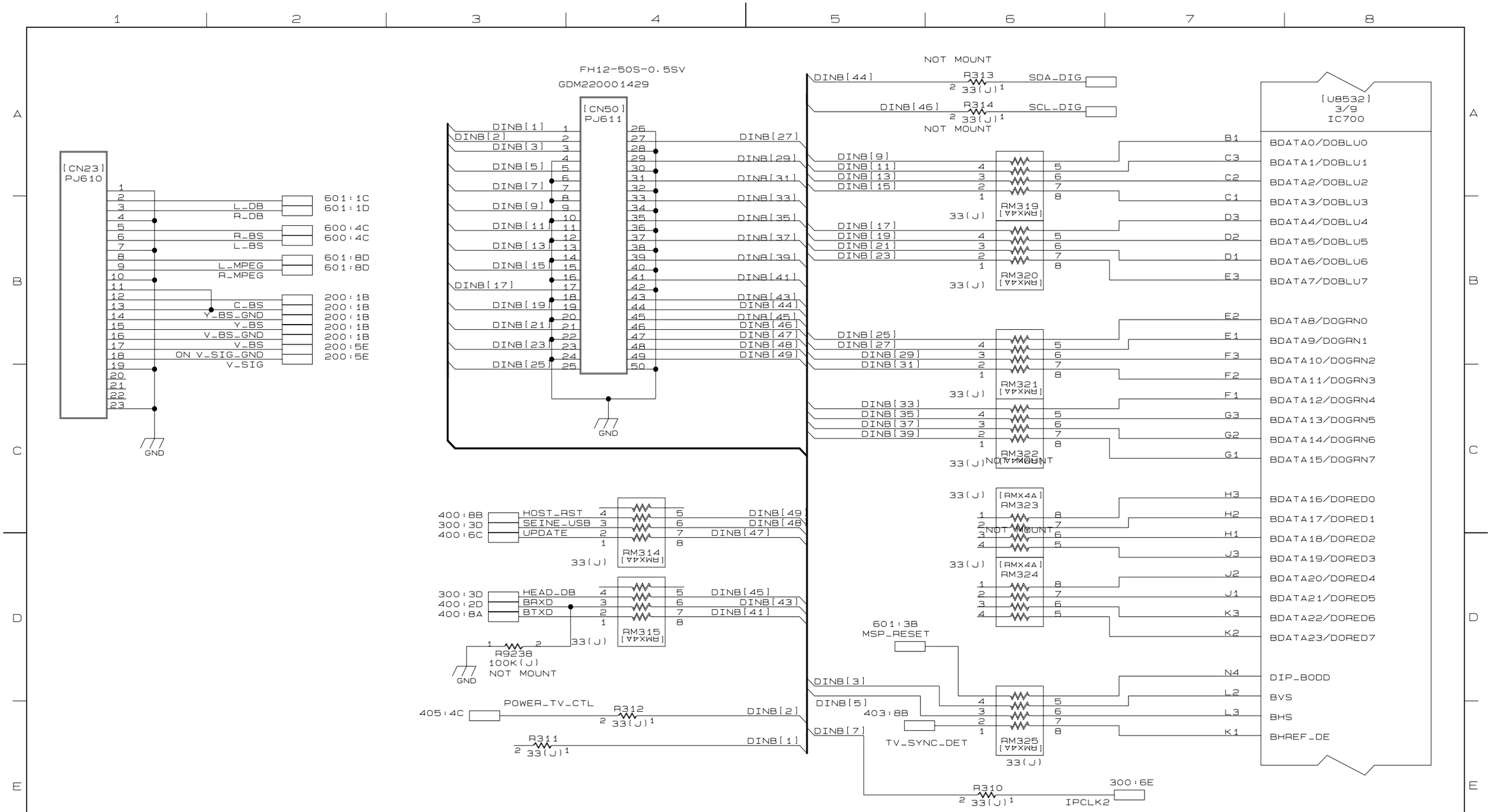
C2019
R2027
C2020
R2029
R2031
R2032
R2034
R2036
R2037
R2039
R2040
R2041
R2042
R2045
R2046
R2047
R2048
R2049
R2057
R2058
R2059
D4_L1
D4_L2
D4_L3
D4_SW
S1/S2_DET
AV/S_DET1
AV/S_DET2
V_TV
V_BS
V_BS_GND
Y_BS
C_BS
Y_BS_GND
V_SIG
V_SIG GND
CVBS_CD
V_SYNC_SEPA
SCART_FB
SDA1
SCL1
GP1
GP2
GP3
GP4
GP5
GP6
GP7
GP8
GP9
GP10
+3.3V_I/O
NOT MOUNT
MOUNT
W201
W202
W203
W204
W205
AB1
AF1
AF4
AF7
AD1
AC2
AE2
AE5
AE8
AF3
BN
AC1
AF2
AF5
AF8
AF6
CN
AB2
AE1
AE4
AE7
AF9
SVN
AA1
NC
AC7
VOUT2
AF12
AE12
AIP_RAW_HS_CS
AIP_RAW_VS
AD13
AC13
AF13
EXT_OSD_VS
EXT_OSD_HS
EXT_OSD_CLK
A1P
A2P
A3P
A4P
AN
B1P
B2P
B3P
B4P
BN
C1P
C2P
C3P
C4P
CN
SV1P
SV2P
SV3P
SV4P
SVN
32WL56P/37WL56P
SIGNAL
ANALOG IN
SH. NO.
200



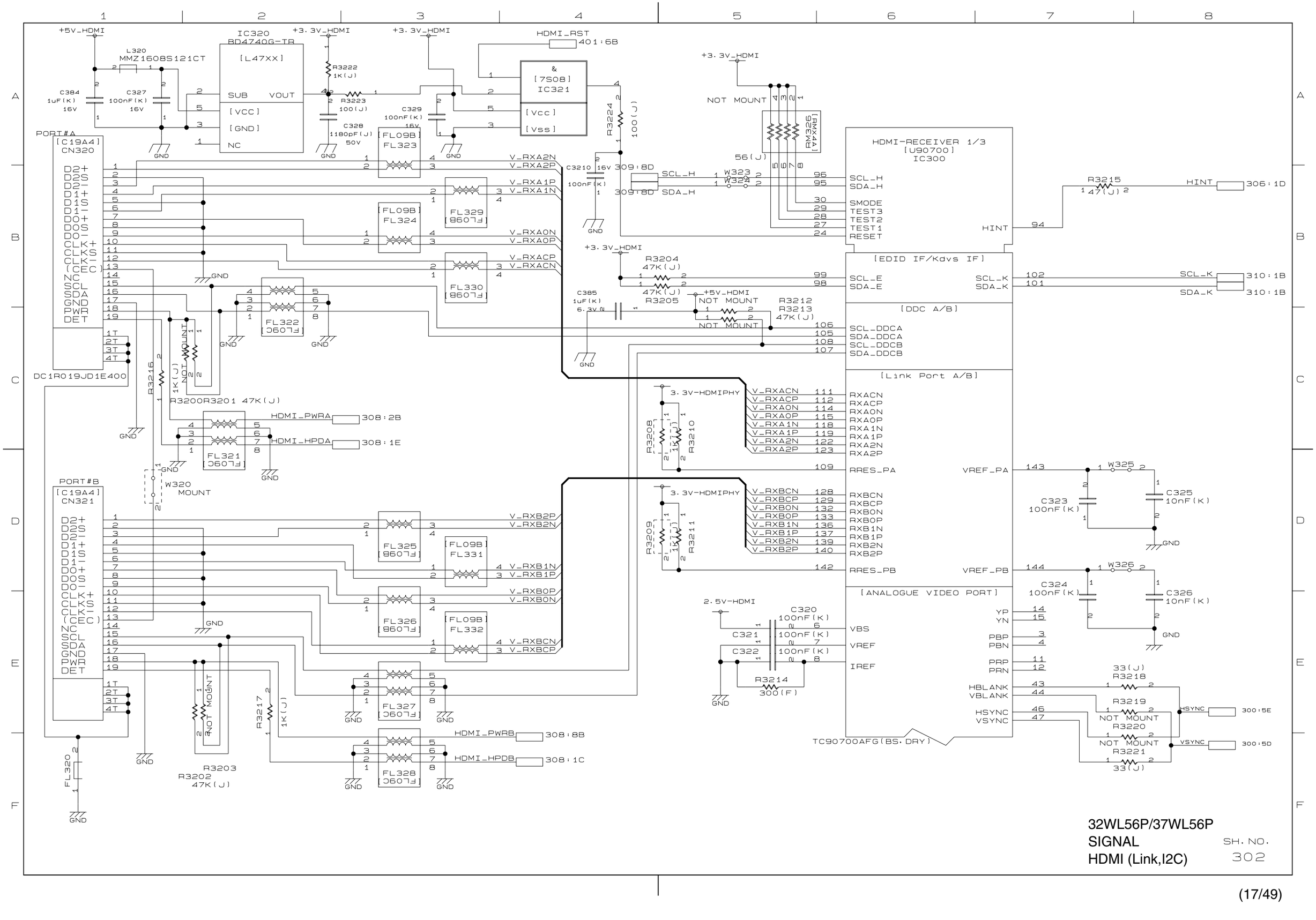

32WL56P/37WL56P
SIGNAL
D IN A

SH. NO.
300



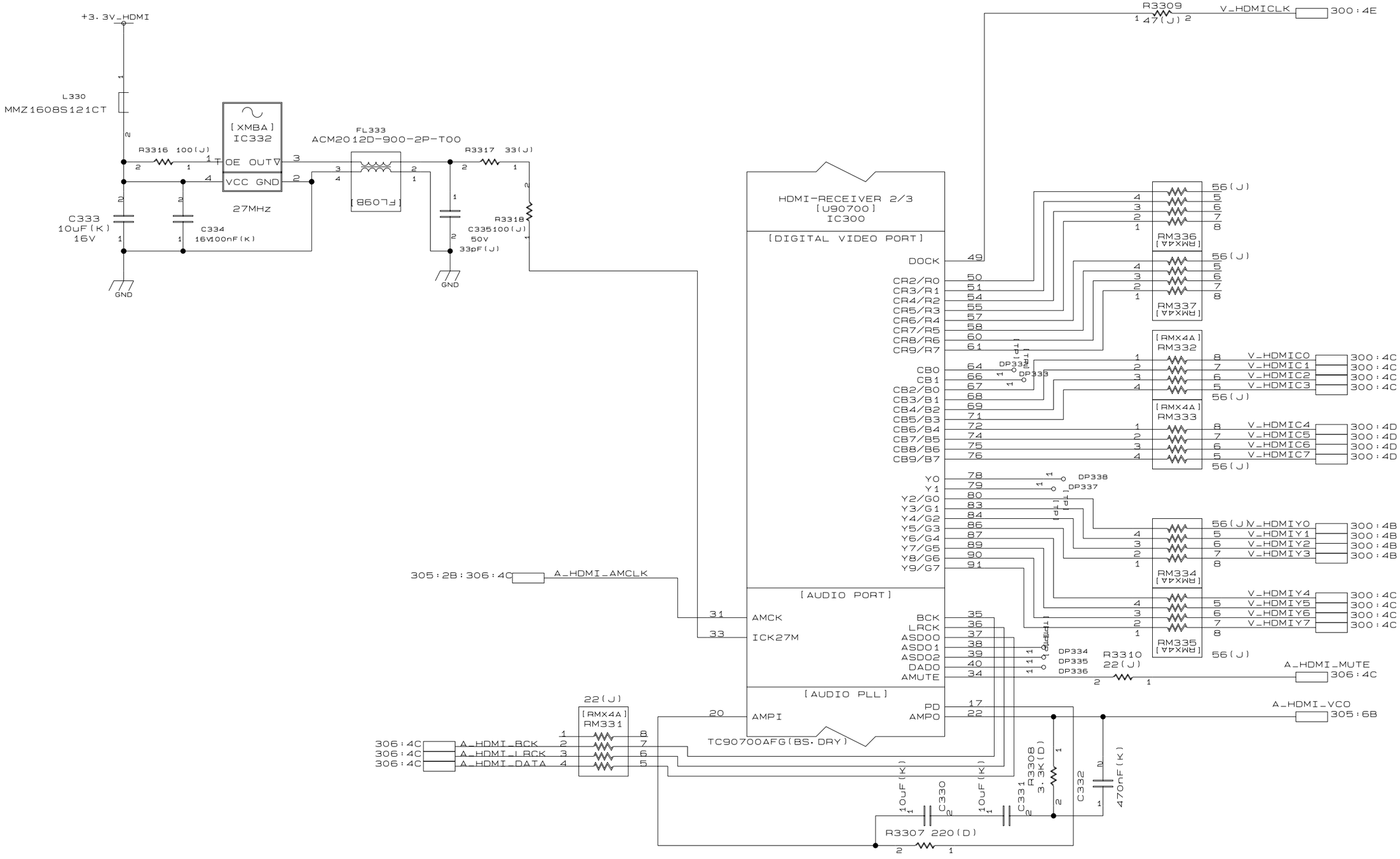

32WL56P/37WL56P
SIGNAL
D IN B

SH. NO.
301



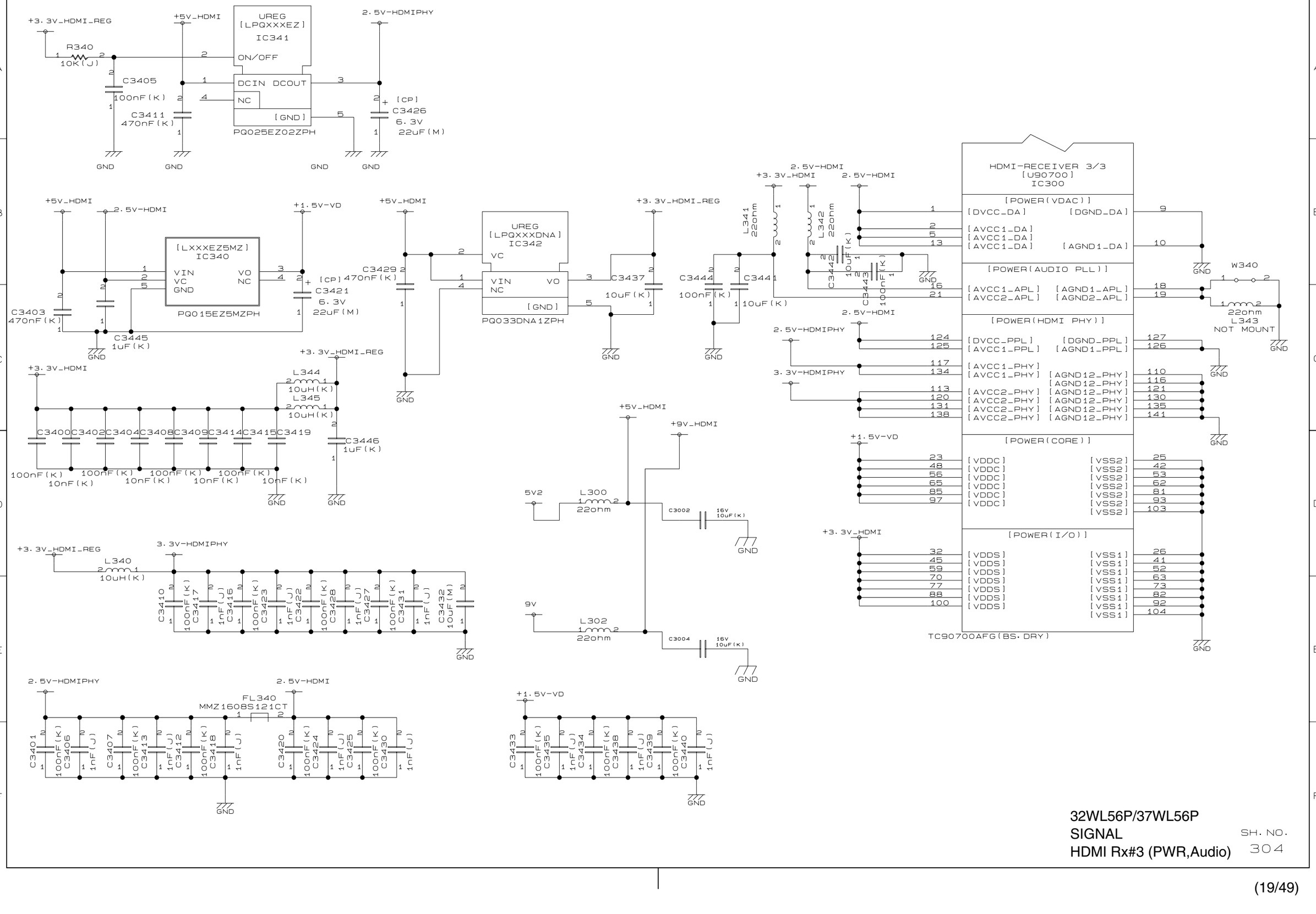

32WL56P/37WL56P
SIGNAL
HDMI (Link,I2C)

SH. NO.
302



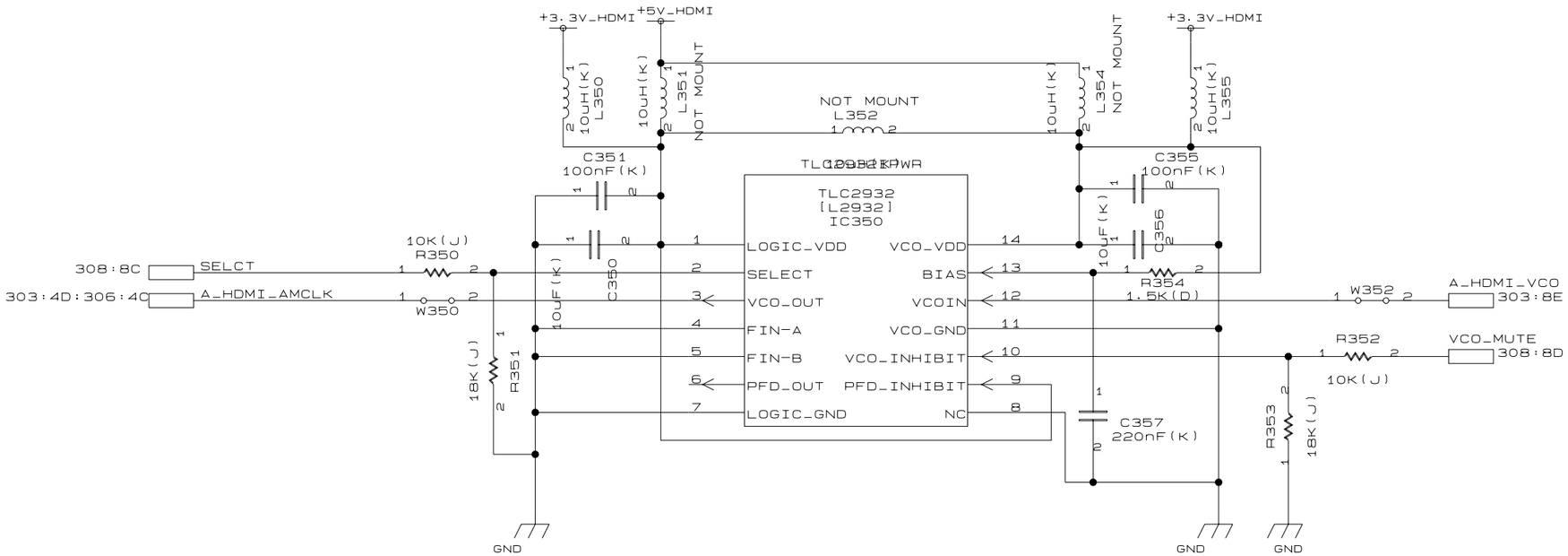

32WL56P/37WL56P
SIGNAL
HDMI Rx#2 (Video/Audio)

SH. NO.
303



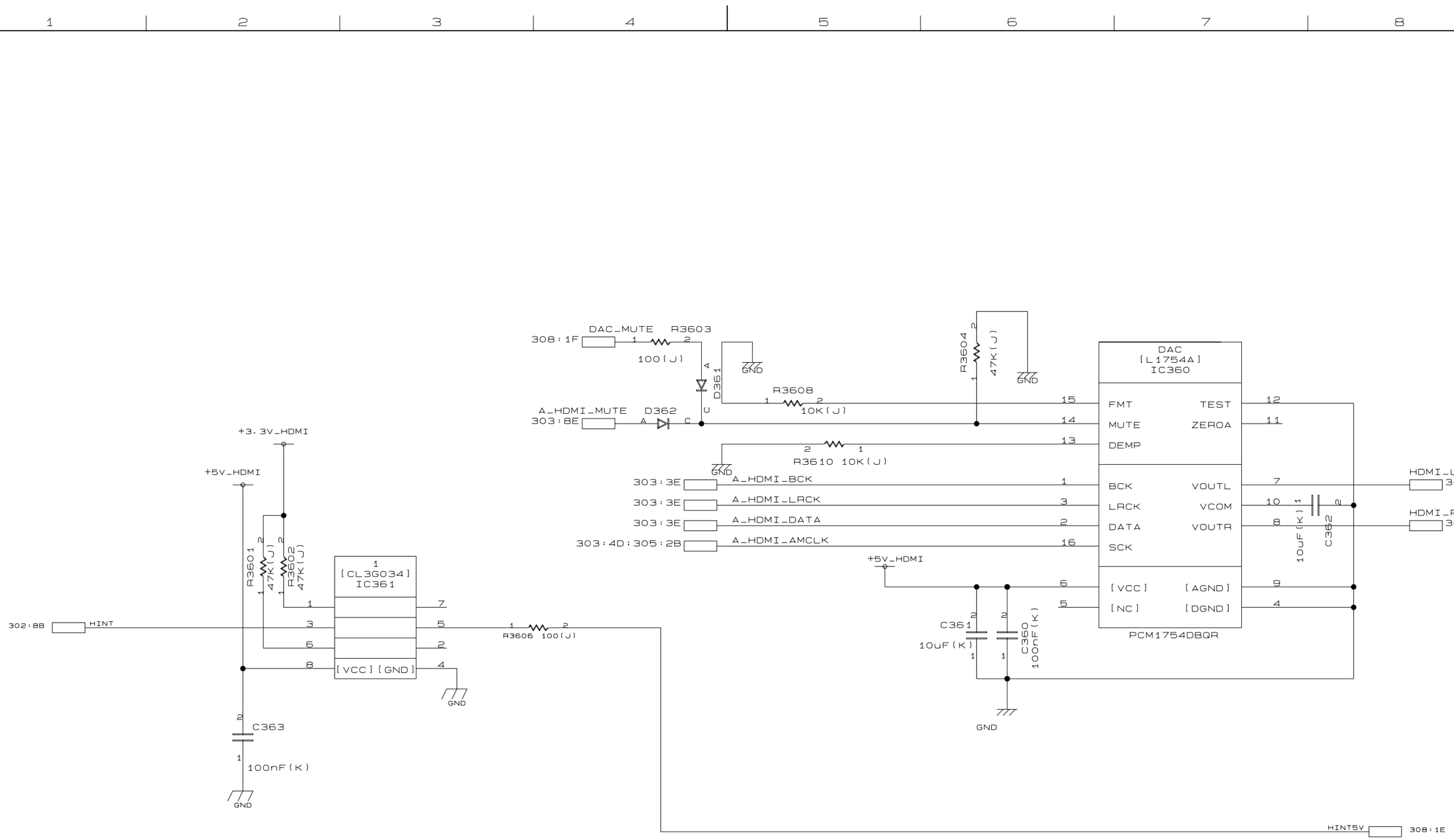

32WL56P/37WL56P
SIGNAL
HDMI Rx#3 (PWR,Audio)

SH. NO.
304



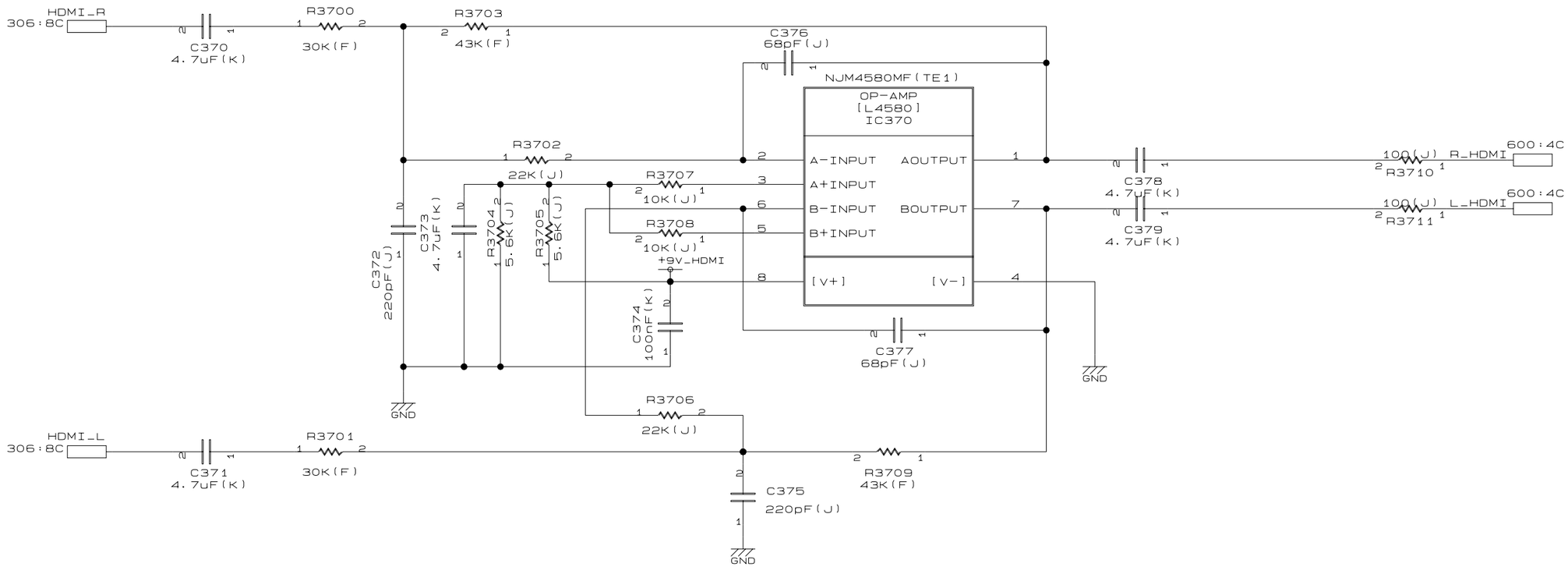

32WL56P/37WL56P
SIGNAL
HDMI AUDIO PLL

SH. NO.
305



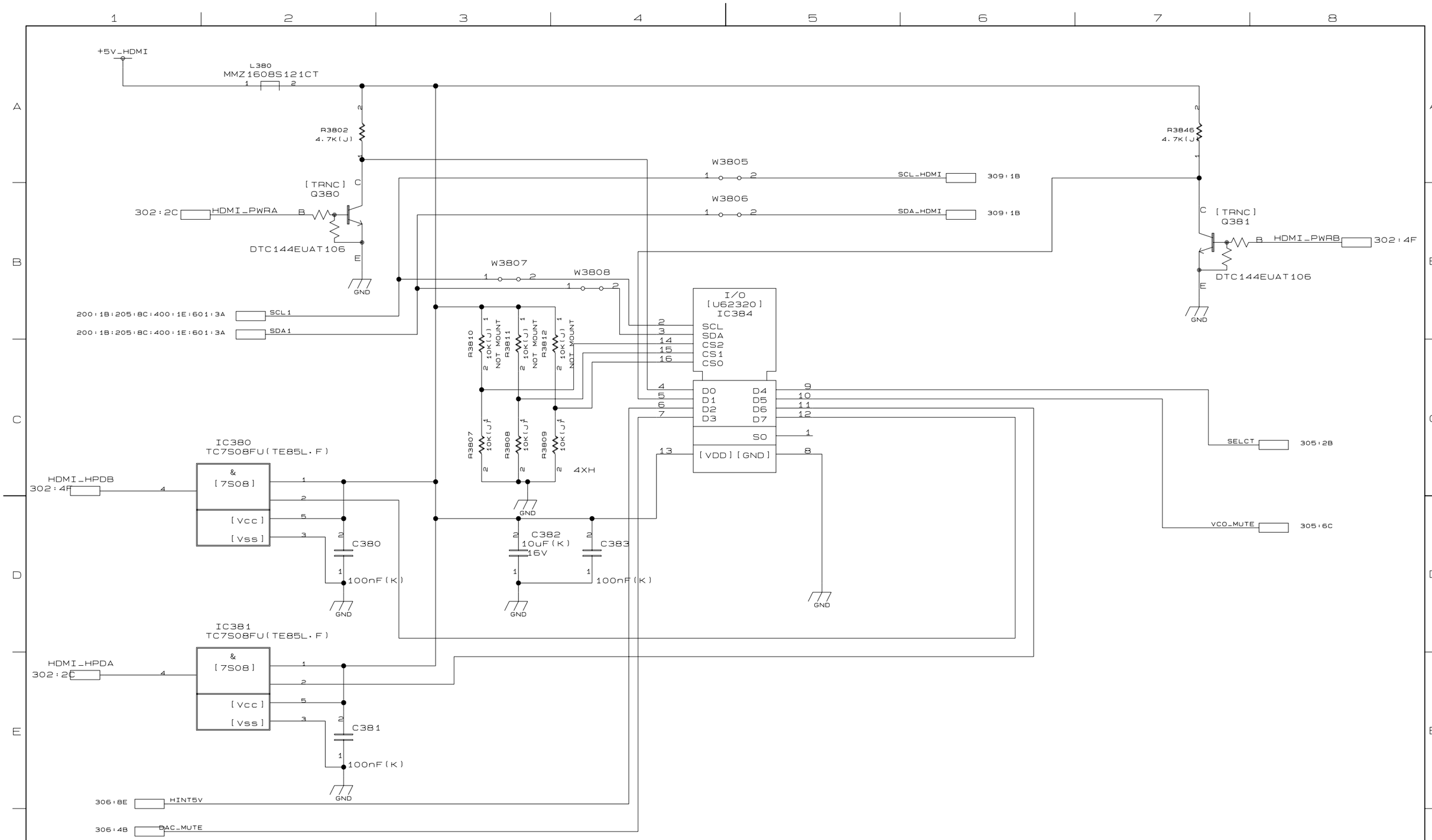

32WL56P/37WL56P
SIGNAL
HDMI AUDIO DAC

SH. NO.
306



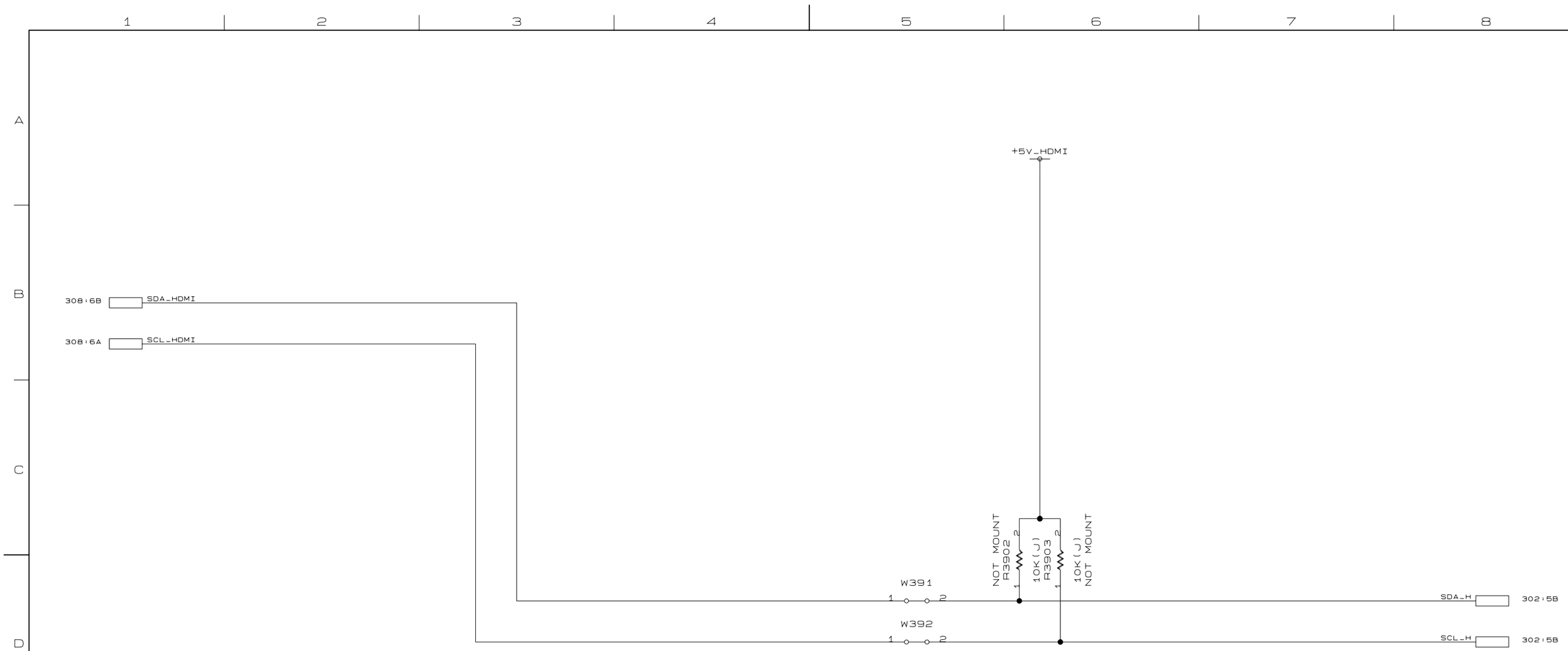

32WL56P/37WL56P
SIGNAL
HDMI AUDIO OUT

SH. NO.
307



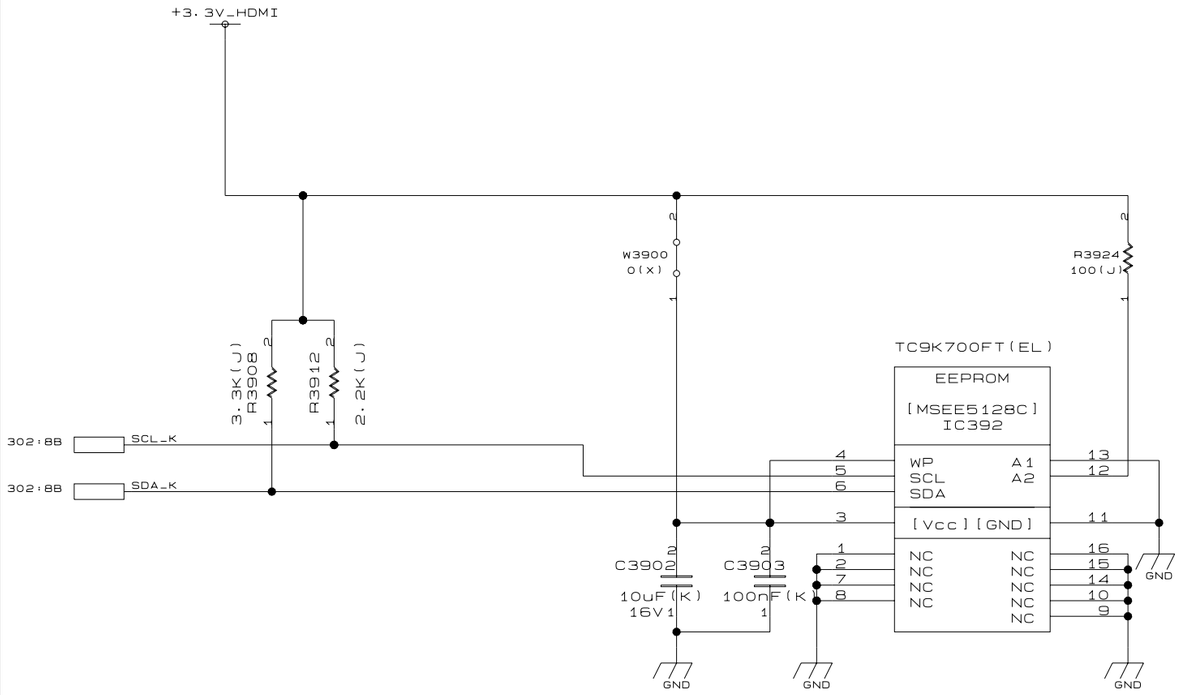

32WL56P/37WL56P
SIGNAL
HDMI CONTROLLER

SH. NO.
308



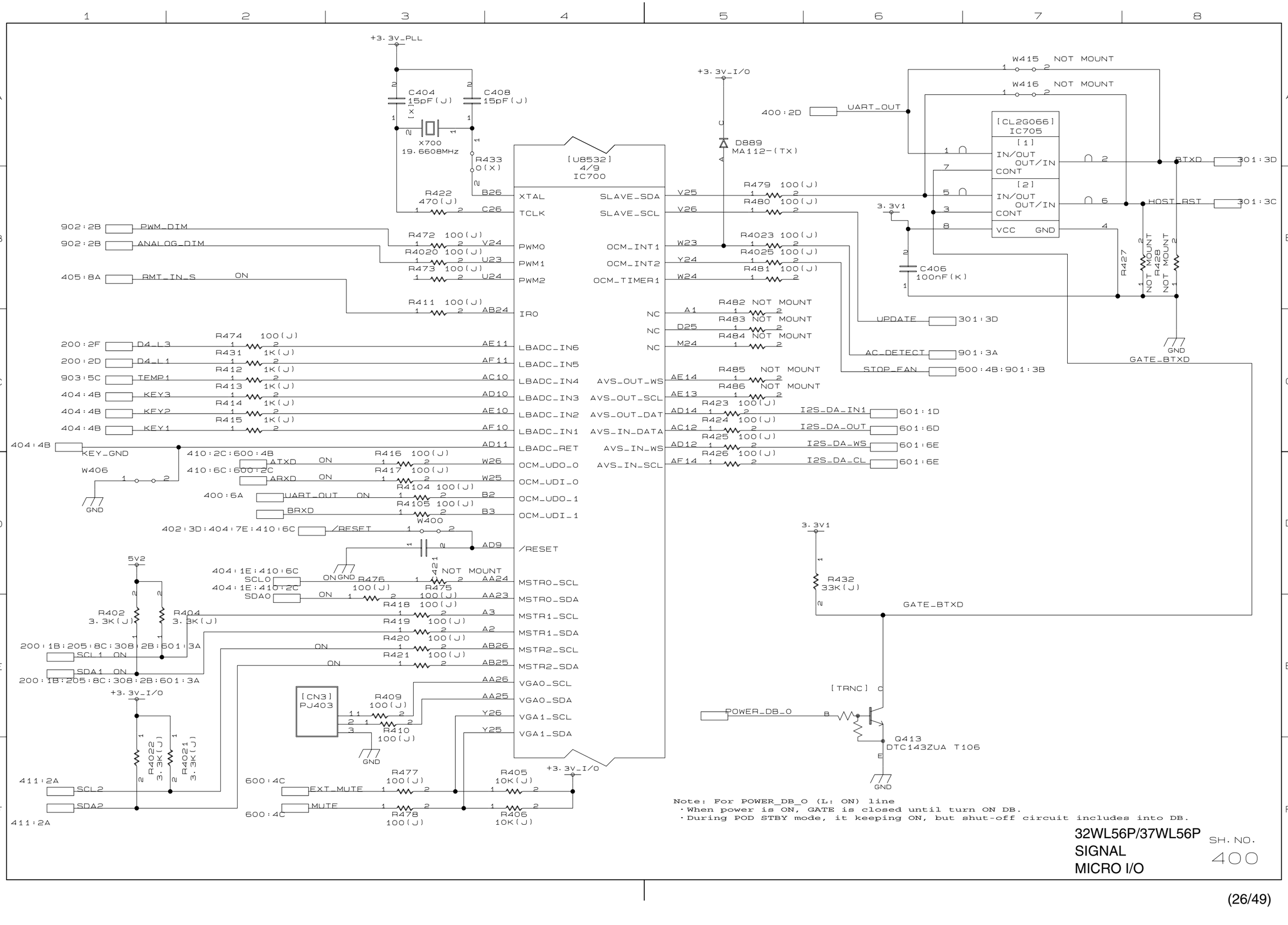

32WL56P/37WL56P
SIGNAL
EEPROM1

SH. NO.
309




32WL56P/37WL56P
SIGNAL
EEPROM2

SH. NO.
310




32WL56P/37WL56P
SIGNAL
MICRO I/O

SH. NO.
400

402:3A;409:1B

/OCM_RE, /OCM_WE, /ROM_CS, OCMADDR[0-20], OCMDATA[0-7]

[U8532]
7/9
IC700

R487 33(J)
R440 33(J)

OCMADDR[20]
OCMADDR[19]
OCMADDR[18]
OCMADDR[17]
OCMADDR[16]
OCMADDR[15]
OCMADDR[14]
OCMADDR[13]
OCMADDR[12]
OCMADDR[11]
OCMADDR[10]
OCMADDR[9]
OCMADDR[8]
OCMADDR[7]
OCMADDR[6]
OCMADDR[5]
OCMADDR[4]
OCMADDR[3]
OCMADDR[2]
OCMADDR[1]
OCMADDR[0]

RM400 [RMX4A] 33(J)
RM401 [RMX4A] 33(J)
RM402 [RMX4A] 33(J)
RM403 [RMX4A] 33(J)
RM404 [RMX4A] 33(J)

| | | | |
|---|---|---|---|
| AF15 | OCMADDR21 | PBIAS | U26 |
| AE15 | OCMADDR20 | PPWR | U25 |
| AD15 | OCMADDR19 | | |
| AC15 | OCMADDR18 | GPIO47 | R25 |
| AF16 | OCMADDR17 | GPIO46 | R24 |
| AE16 | OCMADDR16 | GPIO45 | R23 |
| AD16 | OCMADDR15 | GPIO44 | T26 |
| AF17 | OCMADDR14 | JTAG_BS_TDO | T25 |
| AE17 | OCMADDR13 | JTAG_BS_TMS | T24 |
| AD17 | OCMADDR12 | | |
| AC17 | OCMADDR11 | OCMCS2n | AC24 |
| AF18 | OCMADDR10 | OCMCS1n | AD26 |
| AE18 | OCMADDR9 | OCMCS0n | AD25 |
| AD18 | OCMADDR8 | ROMCSn | AD24 |
| AF19 | OCMADDR7 | OCMWEn | AC26 |
| AE19 | OCMADDR6 | OCMREn | AC25 |
| AD19 | OCMADDR5 | | |
| AC19 | OCMADDR4 | OCMDATA0 | AE26 |
| AF20 | OCMADDR3 | OCMDATA1 | AE25 |
| AE20 | OCMADDR2 | OCMDATA2 | AE24 |
| AD20 | OCMADDR1 | OCMDATA3 | AF26 |
| AF21 | OCMADDR0 | OCMDATA4 | AF25 |
| | | OCMDATA5 | AF24 |
| | | OCMDATA6 | AC23 |
| | | OCMDATA7 | AD23 |
| | | OCMDATA8 | AE23 |
| | | OCMDATA9 | AF23 |
| | | OCMDATA10 | AD22 |
| | | OCMDATA11 | AE22 |
| | | OCMDATA12 | AF22 |
| | | OCMDATA13 | AC21 |
| | | OCMDATA14 | AD21 |
| | | OCMDATA15 | AE21 |

R441 100(J) — BL_ONOFF — 902:1D
R442 100(J) — POWER_LCD — 901:3B
R443 100(J) — D4_SW — 200:4D
R444 100(J) NOT MOUNT — STBY_RST — 405:3E
R445 100(J) — HDMI_RST — 302:4A
R446 100(J) — POWER_KEY_S — 405:8A
R447 100(J) — GP1 — 200:1C
R448 100(J) — BS_TV_MUTE — 600:4C
R488 100(J) — USB — 300:1D
R489 100(J) — MAIN_SYNC_DET — 403:8E
R449 1K(J) — D4_L2 — 200:2E

+3.3V_I/O
R40710K(J)

[RMX4A] RM407 33(J)
/ROM_CS
/OCM_WE
/OCM_RE

[RMX4A] RM405 33(J)
OCMDATA[0]
OCMDATA[1]
OCMDATA[2]
OCMDATA[3]

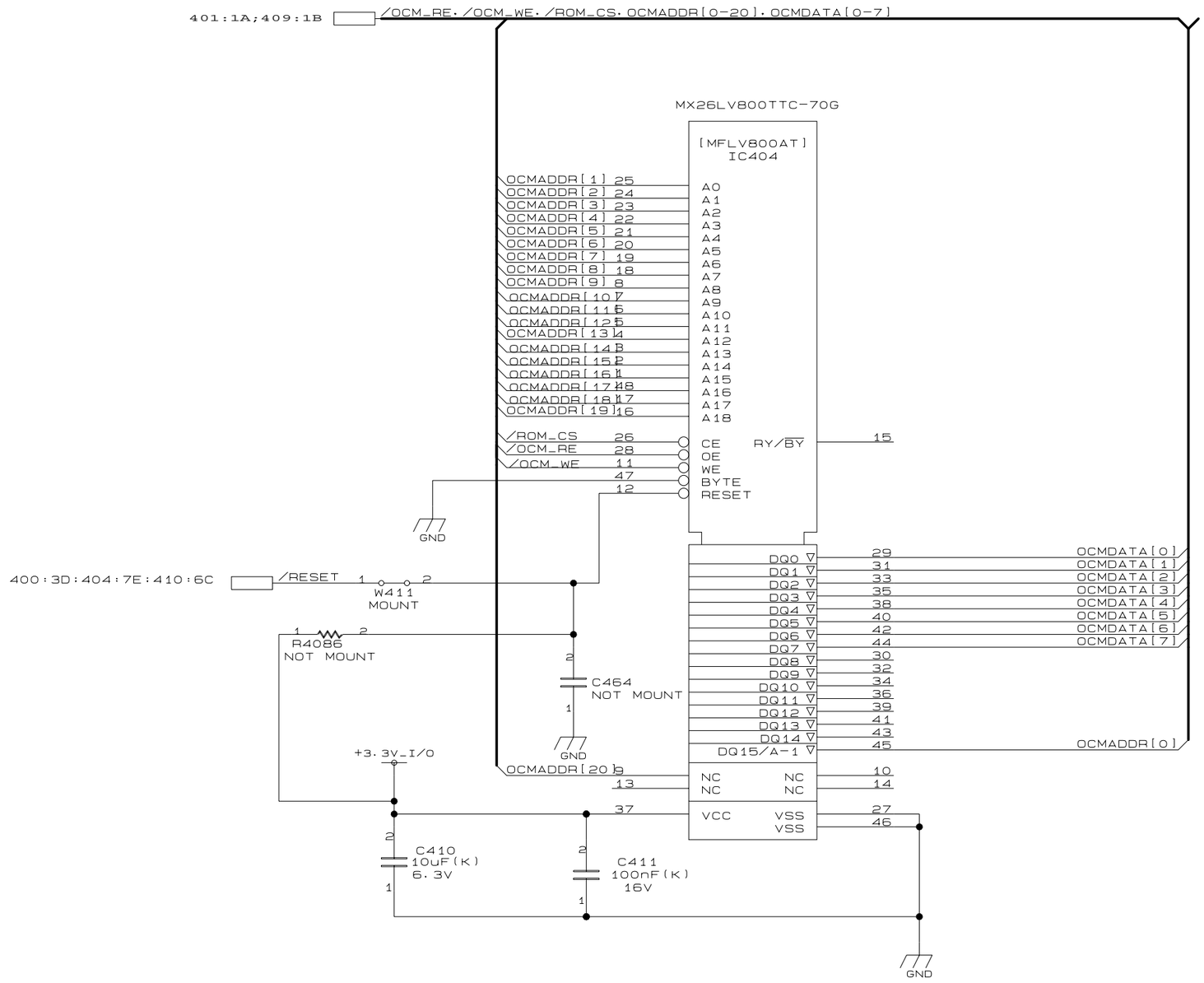
[RMX4A] RM406 33(J)
OCMDATA[4]
OCMDATA[5]
OCMDATA[6]
OCMDATA[7]

R4029 100(J) — SW_DVI1 — 600:4B
R4030 100(J) — AV/S_DET2 — 200:4F
R4031 100(J) NOT MOUNT (AV/S DET3)
R4032 33K(J)
R4033 100(J) — SW_DVI2 — 600:4B
R4034 100(J) — LED3 — 404:8B
R4035 100(J) — LED4 — 404:8B
R4036 100(J) — 50HZ_60HZ — 903:1A

+3.3V_I/O
R4026 33K(J)
[TRP] Q404 2SA1586-Y(TE85L,F)
R4027 1K(J)
R4028 220K(J)
C478 470pF(J)
300:4E:901:3B
POWER_SIG_DET
GND

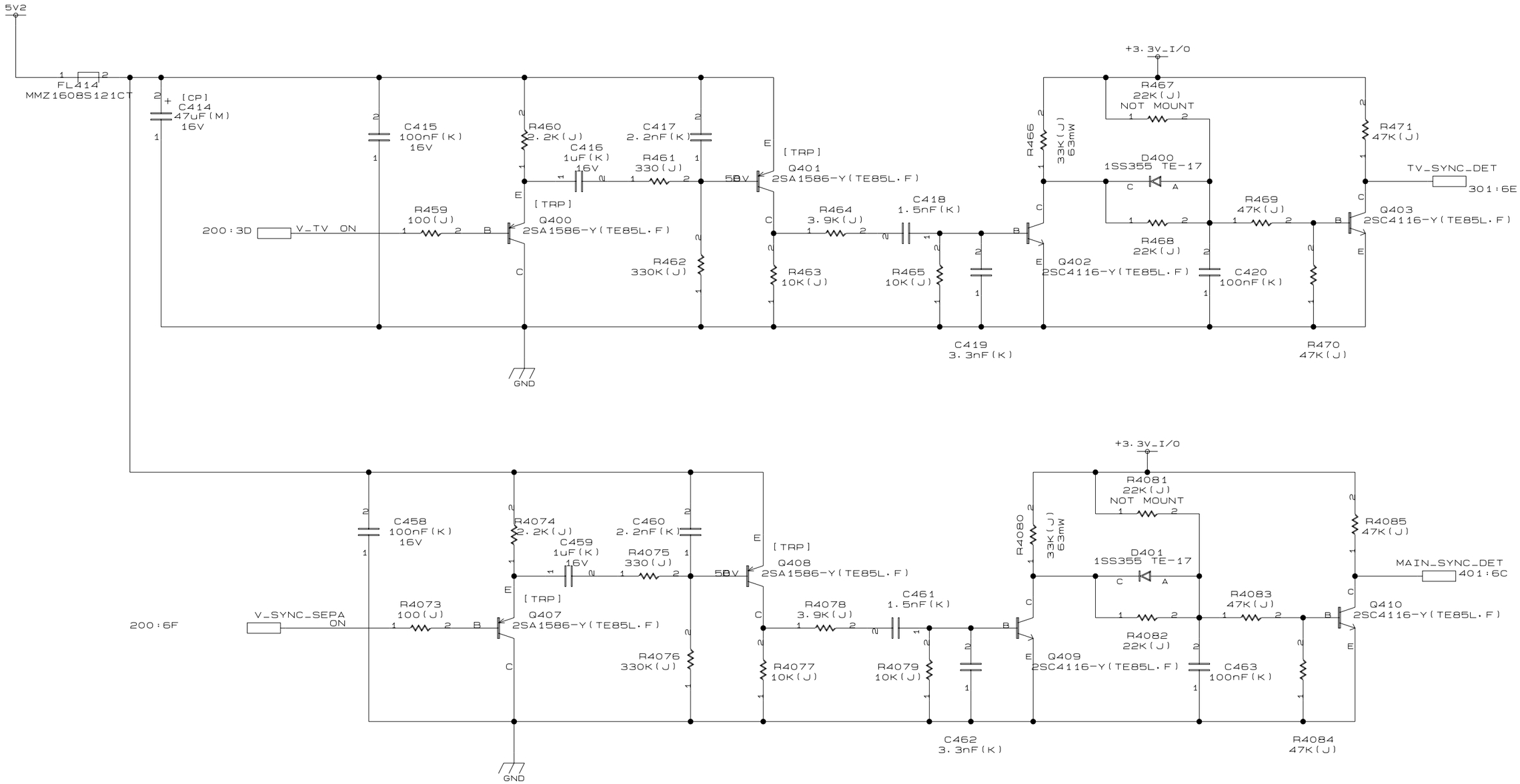
32WL56P/37WL56P
SIGNAL
OCM MEMORY I/F

SH. NO. 401



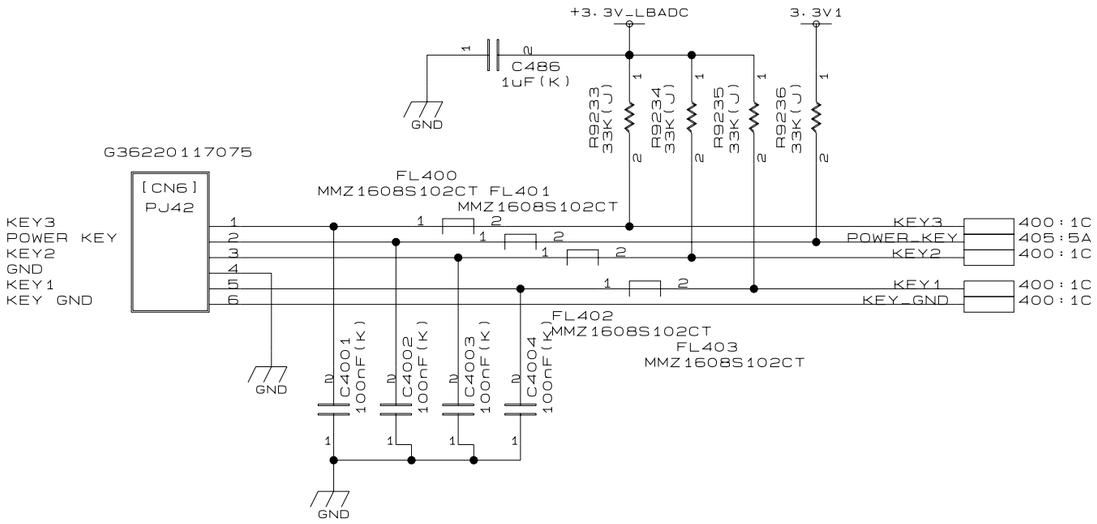

32WL56P/37WL56P
SIGNAL
FLASH MEMORY

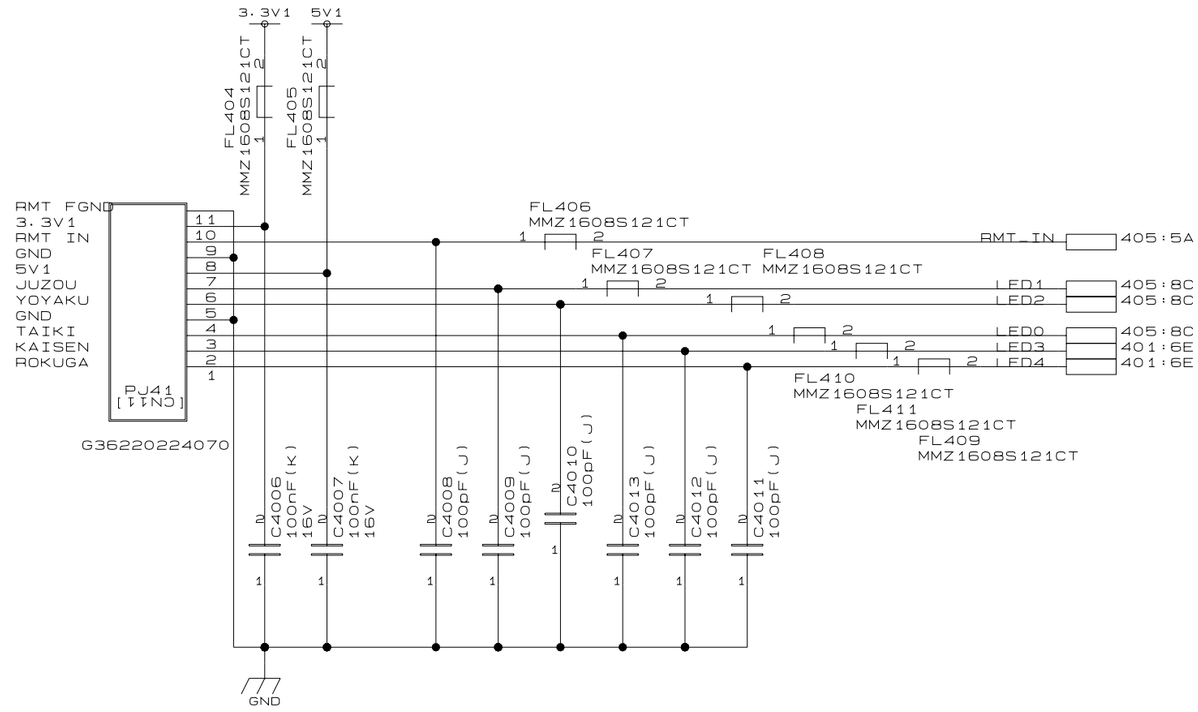
SH. NO.
402

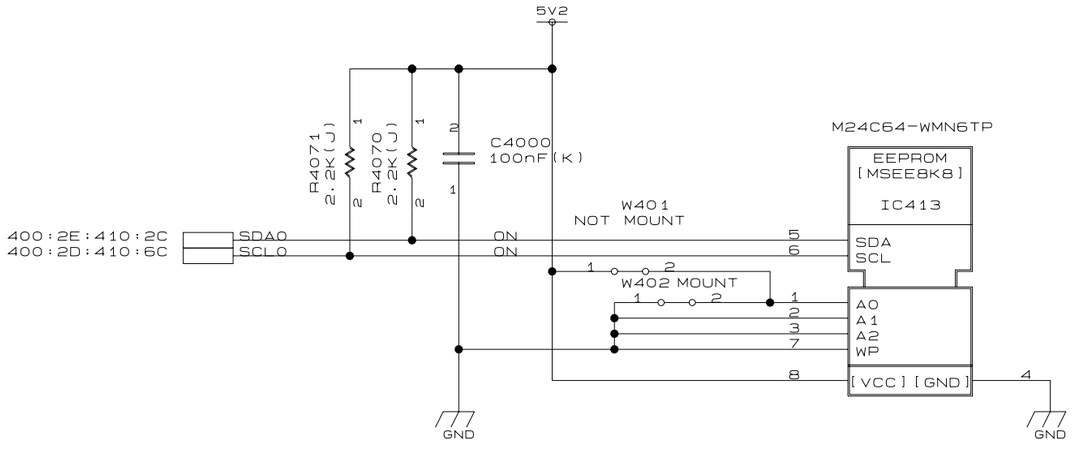


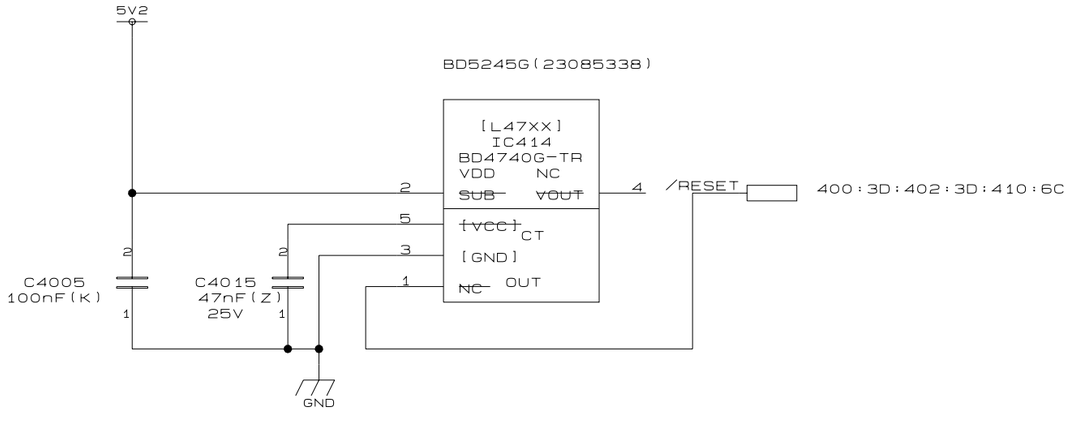

32WL56P/37WL56P
SIGNAL
SYNC SEPA

SH. NO.
403



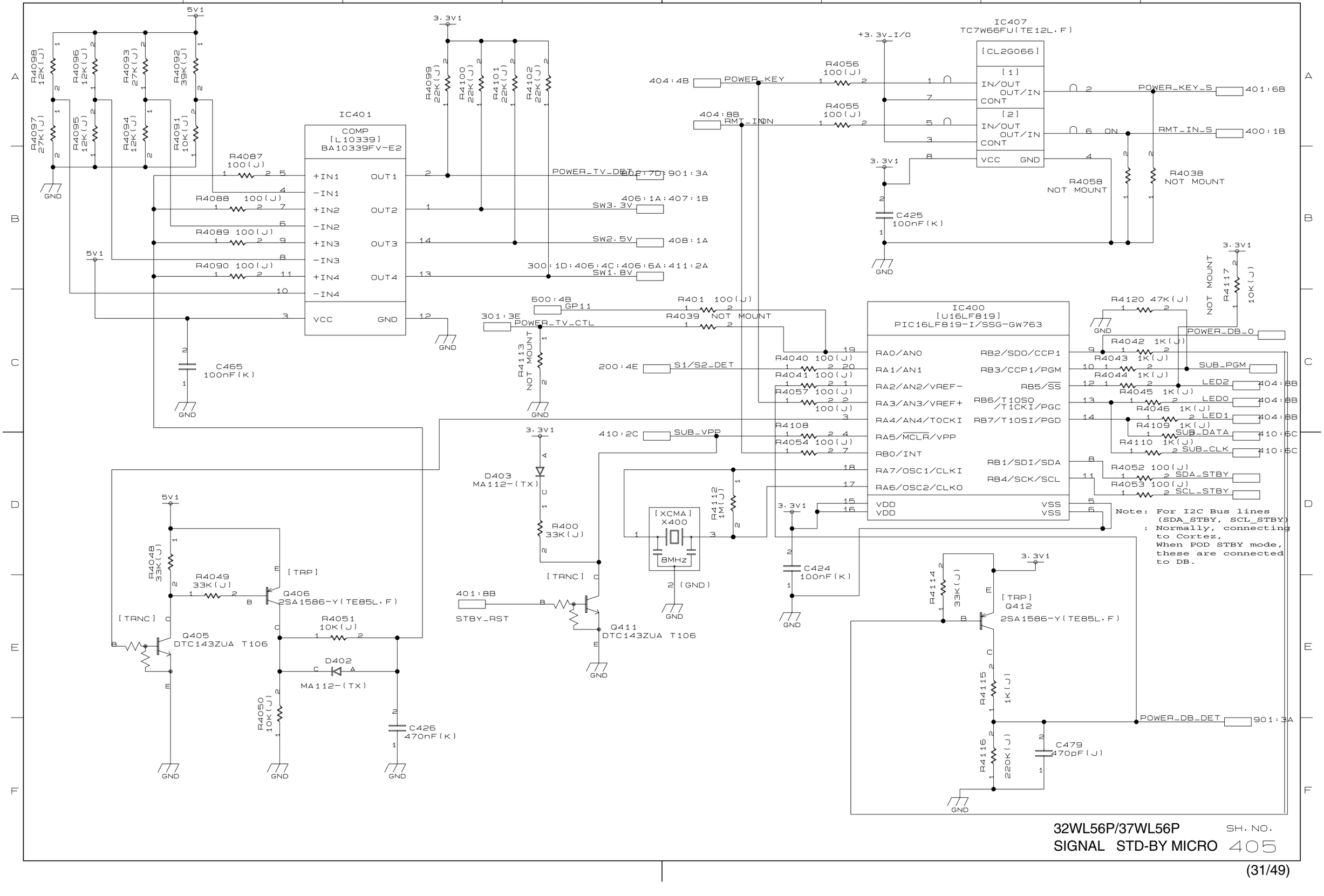




32WL56P/37WL56P
SIGNAL
E2P OTHER

SH. NO.
404




32WL56P/37WL56P SH. NO.

SIGNAL STD-BY MICRO 405

405:4B:407:1B

SW3.3V
R4059
100(J)
C471
47pF(J)
GND
IC402
PQ070XH02ZPH
UREG
[LPQ070XH]
3.3V
VC
VADJ
VIN VO
[GND]
5V2
C428
1uF(K)
+3.3V
C427
47uF(M)
[CP]
C487
1uF(K)
6.3V
FL423
MPZ2012S221AT
+3.3V_I/O
C451
100nF(K)
16V
R4061
1.5K(F)
R4062
150(F)
R4060
1K(F)

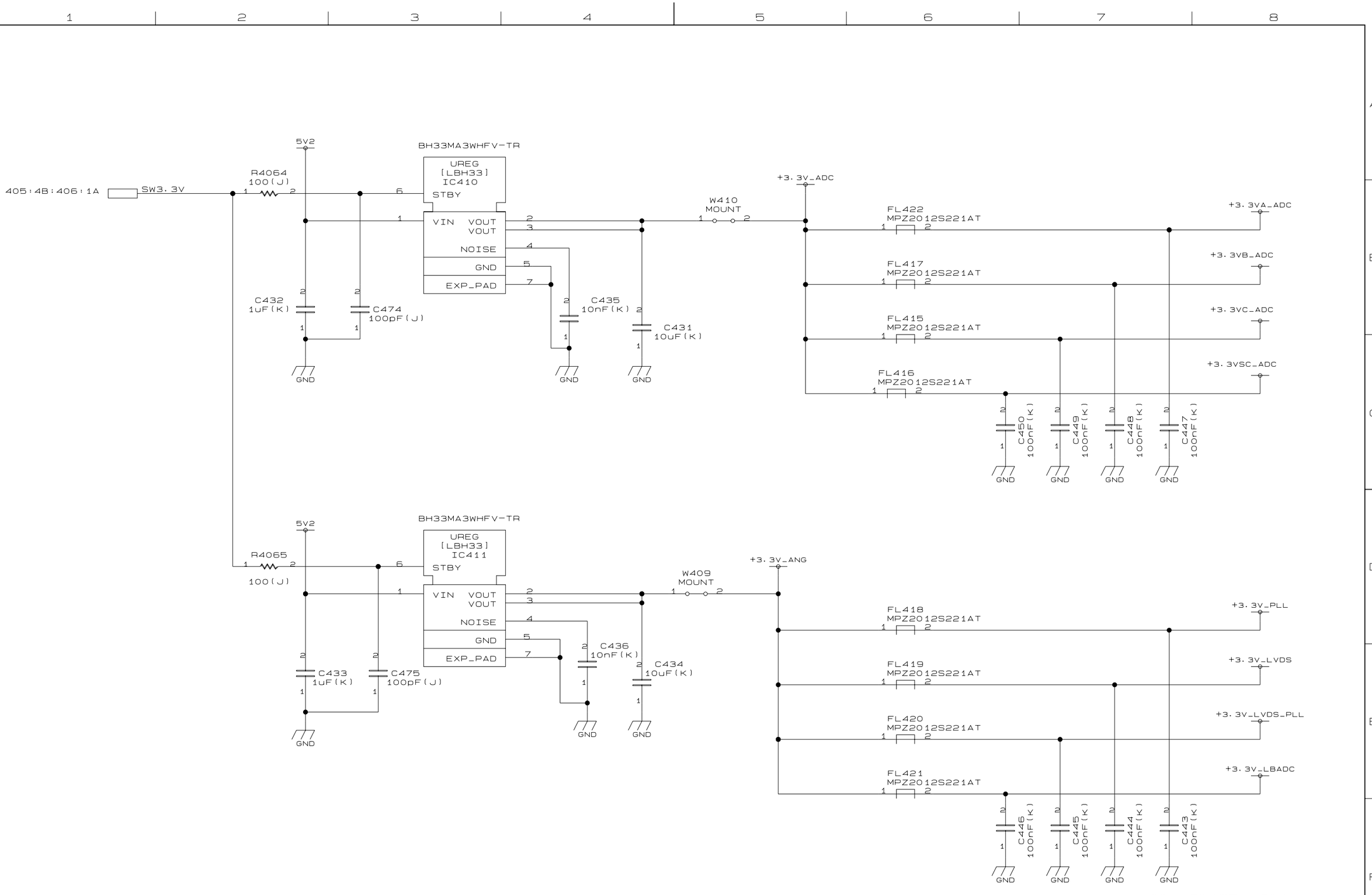
300:1D:405:4B:406:6A:411:2A
SW1.8V
R4063
100(J)
C473
100pF(J)
PQ018EH02ZPH
UREG
[LPQXXXEH]
IC403
1.8V
VC
NC
VIN VO
[GND]
+3.3V
C429
1uF(K)
[CP]
C453
147uF(M)

300:1D:405:4B:406:4C:411:2A
SW1.8V
R4072
100(J)
BH18LB1WG-TR
UREG
[LBHXX]
IC412
STBY NC
VIN VOUT
[GND]
5V2
C452
100nF(K)
C472
100pF(J)
C454
1uF(K)
FL427
MPZ1608S221AT
+1.8V_ADC

NOT MOUNT
FL428
MPZ1608S221AT
FL425
MPZ1608S221AT
+1.8V_DLL
FL426
MPZ1608S221AT
+1.8V_PLL
FL424
MPZ1608S221AT
+1.8V_CORE
C430
100nF(K)
C456
100nF(K)
C455
100nF(K)

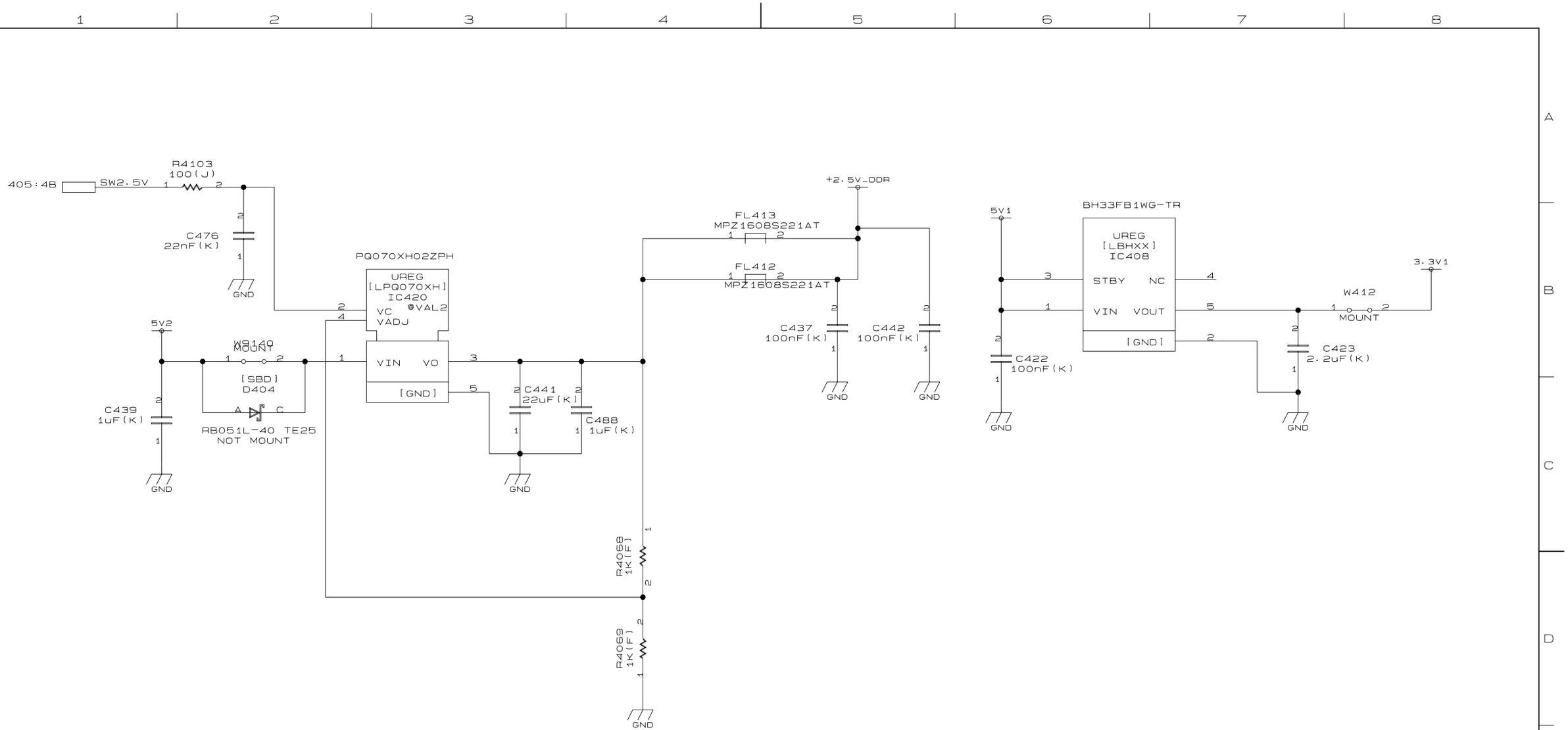
32WL56P/37WL56P
SIGNAL
CORTEZ REG 1

SH. NO.
406




32WL56P/37WL56P
SIGNAL
CORTEZ REG 2

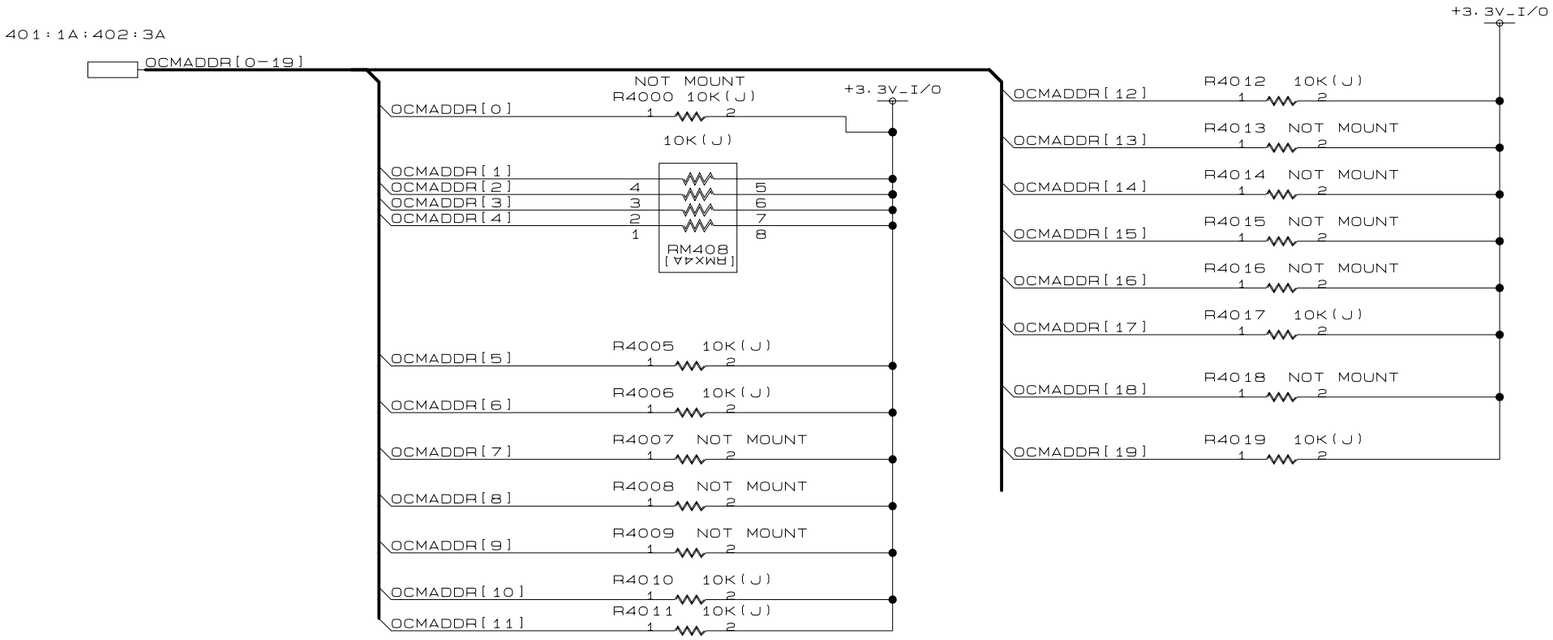
SH. NO.
407




32WL56P/37WL56P
SIGNAL
CORTEZ REG 3

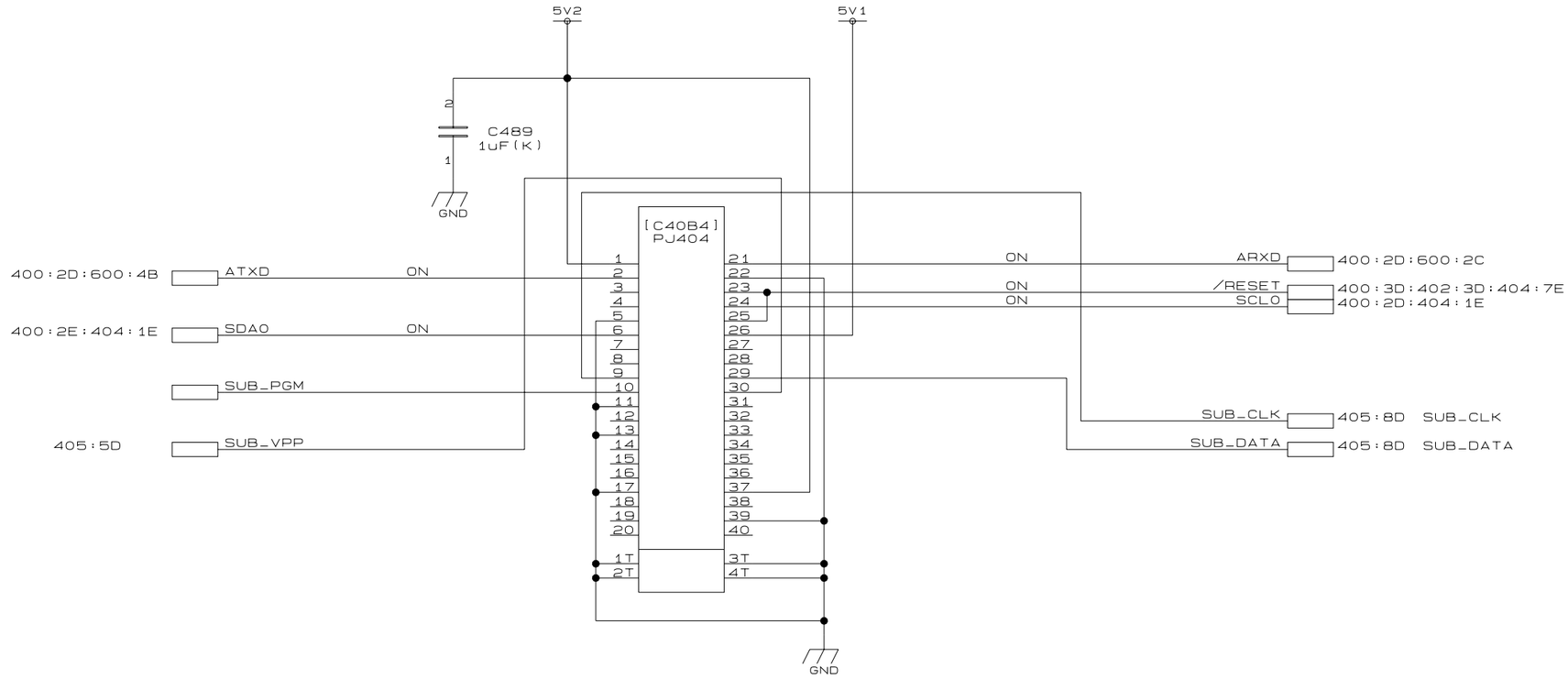
SH. NO.
408

401:1A:402:3A



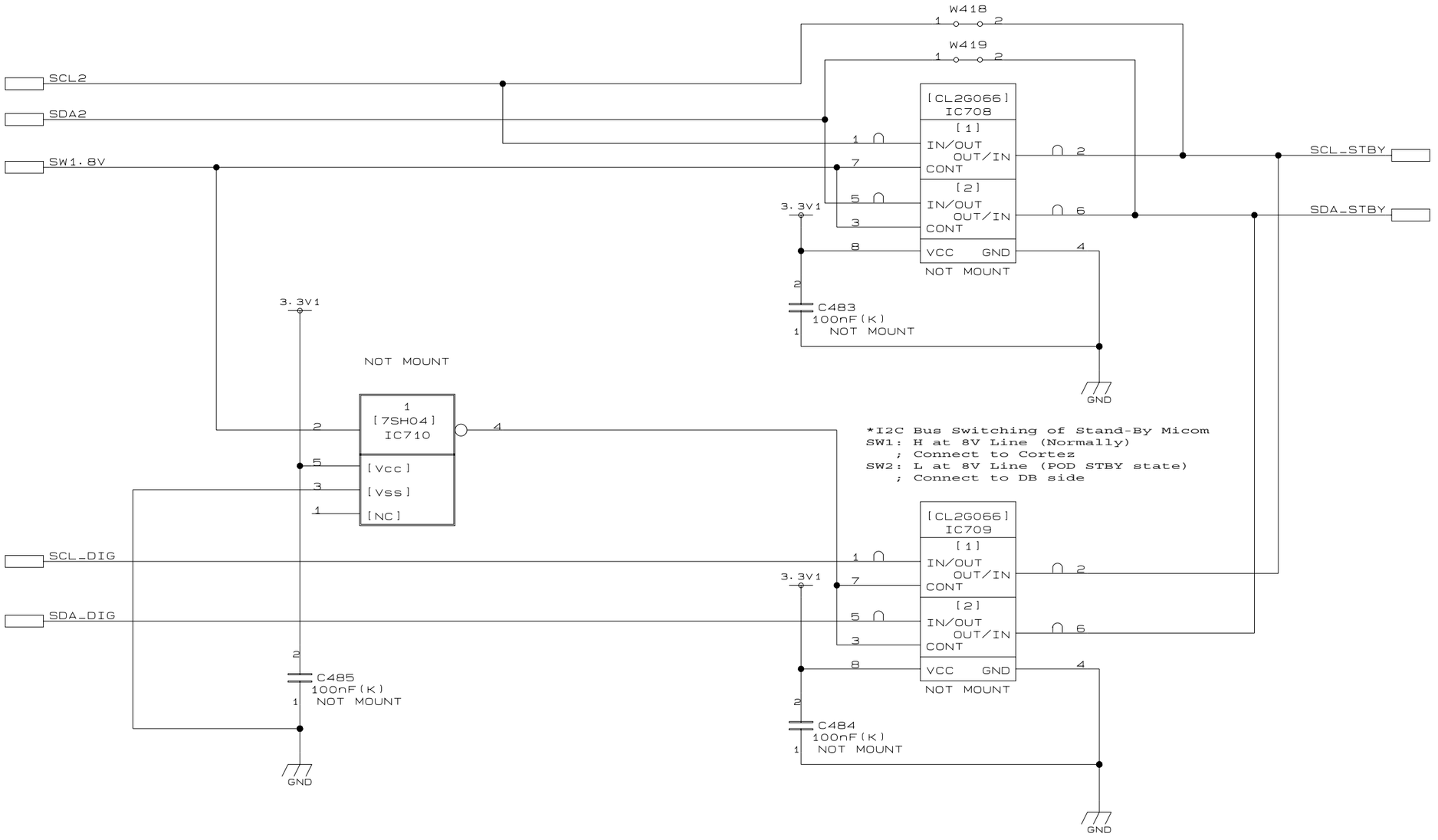

32WL56P/37WL56P
SIGNAL
BOOT CONFIG

SH. NO.
409



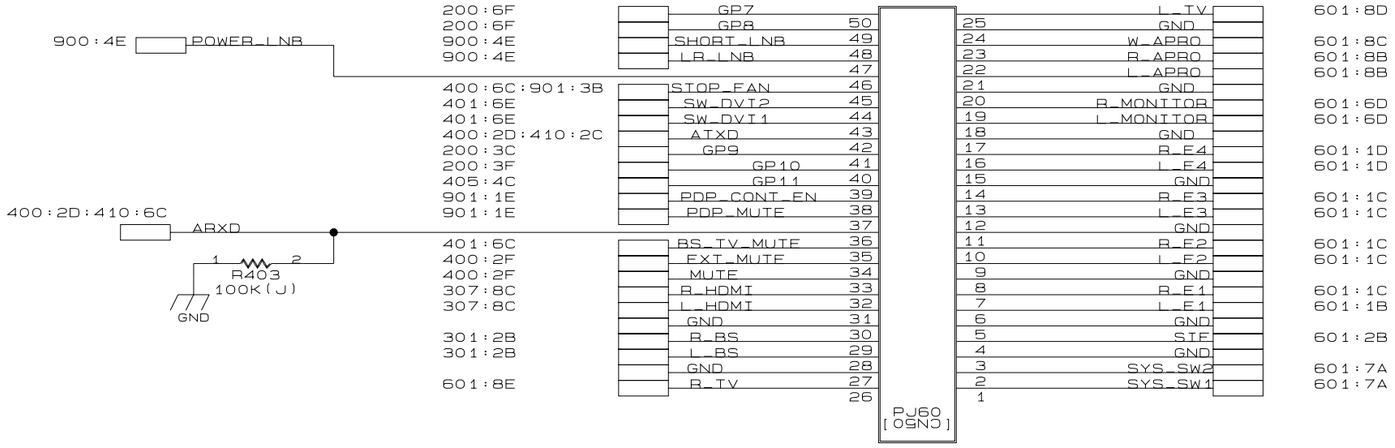

32WL56P/37WL56P
SIGNAL
SERVICE CONNECTOR

SH. NO.
410




32WL56P/37WL56P
SIGNAL
I2C Switch

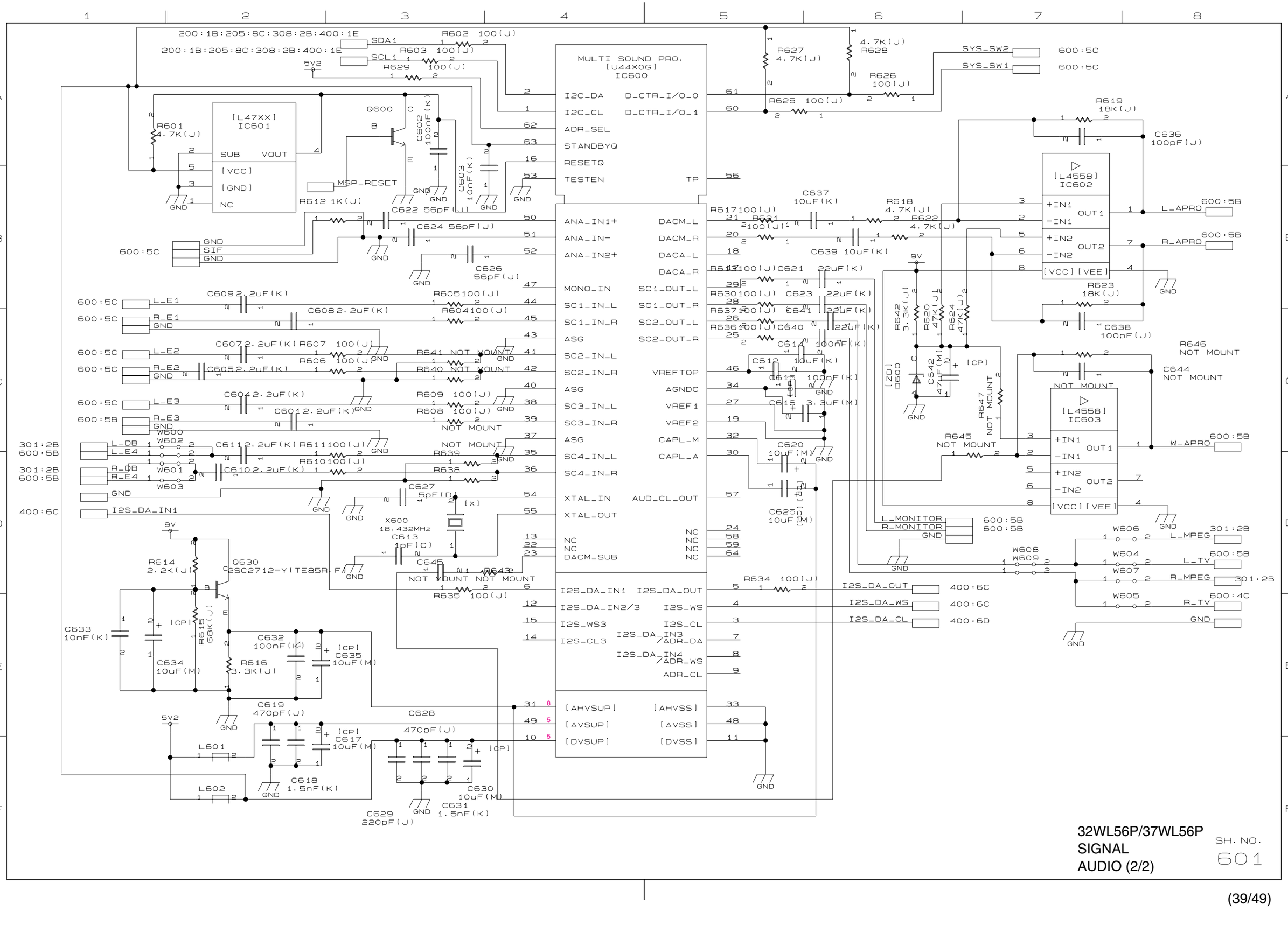
SH. NO.
411

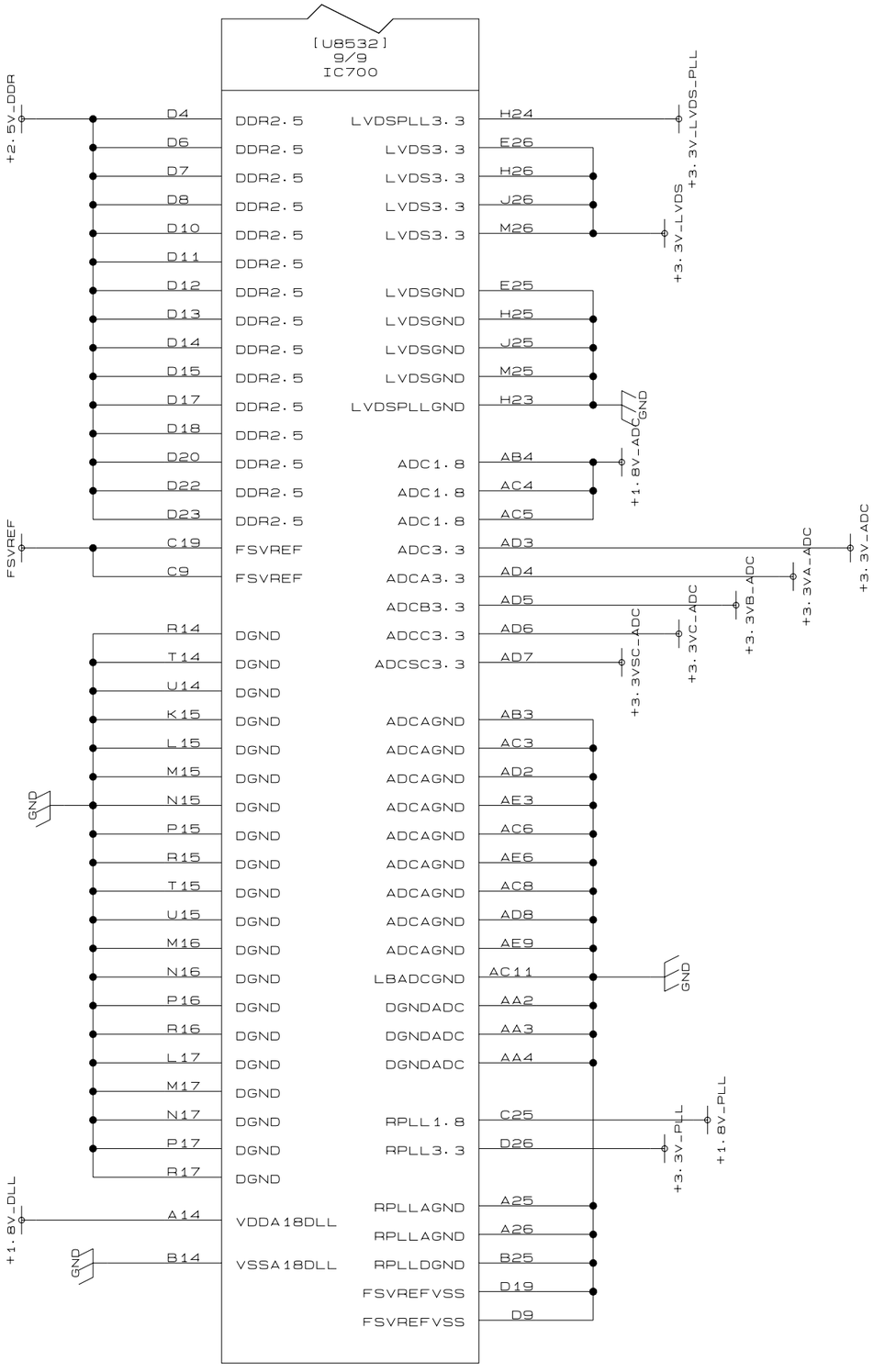



G36220157026

32WL56P/37WL56P
SIGNAL
AUDIO (1/2)

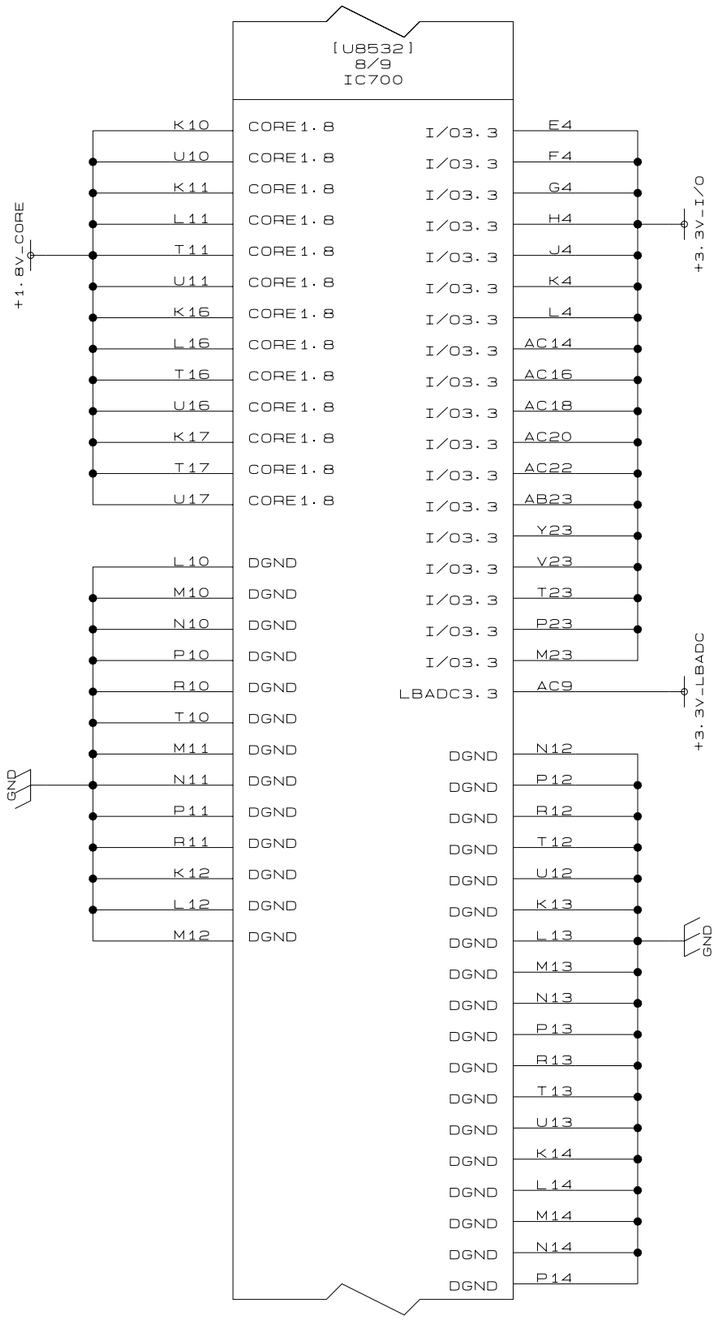
SH. NO.
600

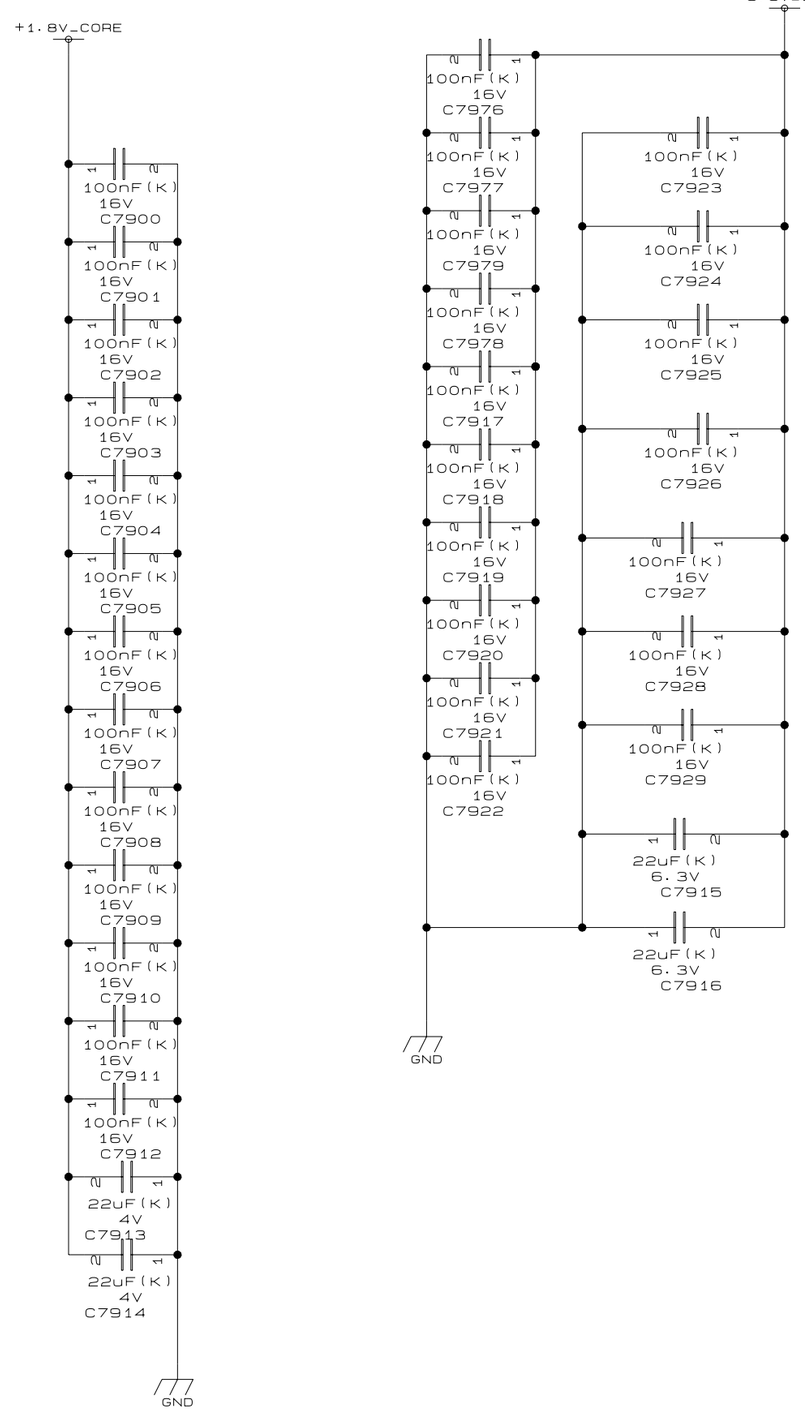

MULTI SOUND PRO.
[U44X0G]
IC600
I2C_DA
I2C_CL
ADR_SEL
STANDBYQ
RESETQ
TESTEN
D_CTR_I/O_0
D_CTR_I/O_1
TP
ANA_IN1+
ANA_IN-
ANA_IN2+
MONO_IN
SC1_IN_L
SC1_IN_R
ASG
SC2_IN_L
SC2_IN_R
ASG
SC3_IN_L
SC3_IN_R
ASG
SC4_IN_L
SC4_IN_R
XTAL_IN
XTAL_OUT
NC
NC
DACM_SUB
DACM_L
DACM_R
DACA_L
DACA_R
SC1_OUT_L
SC1_OUT_R
SC2_OUT_L
SC2_OUT_R
VREFTOP
AGNDC
VREF1
VREF2
CAPL_M
CAPL_A
AUD_CL_OUT
NC
NC
NC
NC
I2S_DA_IN1
I2S_DA_IN2/3
I2S_WS3
I2S_CL3
I2S_DA_OUT
I2S_WS
I2S_CL
I2S_DA_IN3/ADR_DA
I2S_DA_IN4/ADR_WS
ADR_CL
[AHVSUP]
[AVSUP]
[DVSUP]
[AHVSS]
[AVSS]
[DVSS]
SDA1
SCL1
5V2
R602 100(J)
R603 100(J)
R629 100(J)
R627 4.7K(J)
R628 4.7K(J)
R626 100(J)
R625 100(J)
SYS_SW2
SYS_SW1
600:5C
R601 4.7K(J)
[L47XX]
IC601
SUB
VOUT
[VCC]
[GND]
NC
Q600
C602 100nF(K)
C603 10nF(K)
MSP_RESET
R612 1K(J)
C622 56pF(J)
C624 56pF(J)
C626 56pF(J)
GND
SIF
C637 10uF(K)
R617 100(J)
R621 100(J)
R618 4.7K(J)
R622 4.7K(J)
C639 10uF(K)
R619 18K(J)
C636 100pF(J)
[L4558]
IC602
+IN1
-IN1
+IN2
-IN2
OUT1
OUT2
[VCC][VEE]
L_APRO
R_APRO
600:5B
R623 18K(J)
C638 100pF(J)
9V
R613 100(J)
C621 22uF(K)
R630 100(J)
C623 22uF(K)
R637 100(J)
C641 22uF(K)
R636 100(J)
C640 22uF(K)
C614 100nF(K)
C612 10uF(K)
C611 100nF(K)
C615 3.3uF(M)
C620 10uF(M)
C625 10uF(M)
R642 3.3K(J)
R620 47K(J)
R624 47K(J)
[ZD] D600
C642 47uF(M)
[CP]
R646 NOT MOUNT
C644 NOT MOUNT
R647 NOT MOUNT
R645 NOT MOUNT
[L4558]
IC603
W_APRO
L_MONITOR
R_MONITOR
W606
W608
W609
W604
W607
W605
L_MPEG
L_TV
R_MPEG
R_TV
600:4C
301:2B
I2S_DA_OUT
I2S_DA_WS
I2S_DA_CL
400:6C
400:6D
R634 100(J)
R635 100(J)
C645 NOT MOUNT
R643 NOT MOUNT
X600 18.432MHz
C613 1pF(C)
C627 5pF(D)
[X]
R614 2.2K(J)
Q630 2SC2712-Y(TE85R,F)
C633 10nF(K)
C634 10uF(M)
R615 68K(J)
C632 100nF(K)
R616 3.3K(J)
C635 10uF(M)
C619 470pF(J)
C628 470pF(J)
C617 10uF(M)
C618 1.5nF(K)
C630 10uF(M)
C631 1.5nF(K)
C629 220pF(J)
L601
L602
C609 2.2uF(K)
C608 2.2uF(K)
C607 2.2uF(K)
C605 2.2uF(K)
C604 2.2uF(K)
C601 2.2uF(K)
C611 2.2uF(K)
C610 2.2uF(K)
R605 100(J)
R604 100(J)
R607 100(J)
R606 100(J)
R641 NOT MOUNT
R640 NOT MOUNT
R609 100(J)
R608 100(J)
R611 100(J)
R610 100(J)
R639 NOT MOUNT
R638 NOT MOUNT
W602
W601
W603
W600
L_E1
R_E1
L_E2
R_E2
L_E3
R_E3
L_DB
L_E4
R_DB
R_E4
301:2B
600:5B
400:6C
I2S_DA_IN1
32WL56P/37WL56P
SIGNAL
AUDIO (2/2)
SH. NO.
601




32WL56P/37WL56P
SIGNAL
CORTEZ 1

SH. NO.
700

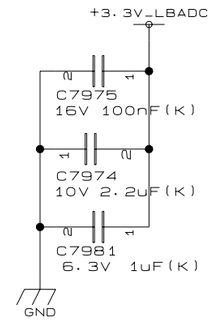









32WL56P/37WL56P
SIGNAL
CORTEZ 2

SH. NO.
701

/FSCAS. /FSCS[0-1]. /FSRAS. /FSWE. FSADDR[0-12]. FSBKSEL[0-1]. FSCKE. FSCLK+. FSCLK-. FSDATA[0-31]. FSDQM[0-3]. FSDQS[0-3]

[U8532]
5/9
IC700

FSDATA[15] FSDATA[14] FSDATA[13] FSDATA[12] — RM700 [RMX4A] 33(J) — B4 A4 B5 A5 — FSDATA0
FSDATA[11] FSDATA[10] FSDATA[9] FSDATA[8] — RM701 [RMX4A] 33(J) — B7 A7 B8 A8 — FSDATA1 FSDATA2 FSDATA3 FSDATA4 FSDATA5 FSDATA6 FSDATA7
FSDATA[7] FSDATA[6] FSDATA[5] FSDATA[4] — RM702 [RMX4A] 33(J) — B9 A9 B10 A10 — FSDATA8 FSDATA9 FSDATA10 FSDATA11
FSDATA[3] FSDATA[2] FSDATA[1] FSDATA[0] — RM703 [RMX4A] 33(J) — B12 A12 B13 A13 — FSDATA12 FSDATA13 FSDATA14 FSDATA15
FSDATA[31] FSDATA[30] FSDATA[29] FSDATA[28] — RM704 [RMX4A] 33(J) — B15 A15 B16 A16 — FSDATA16 FSDATA17 FSDATA18 FSDATA19
FSDATA[27] FSDATA[26] FSDATA[25] FSDATA[24] — RM705 [RMX4A] 33(J) — B18 A18 B19 A19 — FSDATA20 FSDATA21 FSDATA22 FSDATA23
FSDATA[23] FSDATA[22] FSDATA[21] FSDATA[20] — RM706 [RMX4A] 33(J) — B20 A20 B21 A21 — FSDATA24 FSDATA25 FSDATA26 FSDATA27
FSDATA[19] FSDATA[18] FSDATA[17] FSDATA[16] — RM737 [RMX4A] 33(J) — B23 A23 B24 A24 — FSDATA28 FSDATA29 FSDATA30 FSDATA31

FSBKSEL1 FSBKSEL0 FSCKE FSRAS FSCAS FSWE FSDQM3 FSDQM2 FSDQM1 FSDQM0 FSDQS3 FSDQS2 FSDQS1 FSDQS0 FSCS1 FSCS0 FSCLKn FSCLKp FSADDR12 FSADDR11 FSADDR10 FSADDR9 FSADDR8 FSADDR7 FSADDR6 FSADDR5 FSADDR4 FSADDR3 FSADDR2 FSADDR1 FSADDR0

C20 — R736 — FSBKSEL[1]
C21 — R735 — FSBKSEL[0]
C4 — R734 — FSCKE
C24 D24 C23 — [RMX4A] RM707 33(J) — /FSRAS /FSCAS /FSWE
B22 — R740 — FSDQM[2]
B17 — R739 — FSDQM[3]
A11 — R738 — FSDQM[0]
A6 — R737 — FSDQM[1]
A22 — R744 — FSDQS[2]
A17 — R743 — FSDQS[3]
B11 — R742 — FSDQS[0]
B6 — R741 — FSDQS[1]
C22 — R717 — /FSCS[1]
D21 — R718 — /FSCS[0]
C5 — R719 — FSCLK-
D5 — R716 — FSCLK+
C11 C14 D16 C12 C6 C7 C8 C10 C13 — [RMX4A] RM708 33(J) — FSADDR[11] FSADDR[4] FSADDR[9] FSADDR[12]
C15 — R707 33(J) — FSADDR[10]
C16 C17 C18 — RM709 [RMX4A] 33(J) — FSADDR[8] FSADDR[7] FSADDR[6] FSADDR[5]
RM710 [RMX4A] 33(J) — FSADDR[3] FSADDR[2] FSADDR[1] FSADDR[0]

32WL56P/37WL56P
SIGNAL
DDR I/F

SH. NO.
702

/FSCAS. /FSCS[0]. /FSRAS. /FSWE. FSADDR[0-12]. FSBKSEL[0-1]. FSCKE. FSCLK+. FSCLK-. FSDQM[0-1]. FSDQS[0-1]

/FSCAS. /FSCS[0]. /FSRAS. /FSWE. FSADDR[0-12]. FSBKSEL[0-1]. FSCKE. FSCLK+. FSCLK-. FSDATA[0-15]. FSDQM[2-3]. FSDQS[2-3]

702:2A;704:3A

FSDATA[16-31]

HY5DU281622ETP-5 [MDSD8M16] IC701

HY5DU281622ETP-5 [MDSD8M16] IC702

FSADDR[0] 29 A0
FSADDR[1] 30 A1
FSADDR[2] 31 A2
FSADDR[3] 32 A3
FSADDR[4] 35 A4
FSADDR[5] 36 A5
FSADDR[6] 37 A6
FSADDR[7] 38 A7
FSADDR[8] 39 A8
FSADDR[9] 40 A9
FSADDR[10] 28 A10/AP
FSADDR[11] 41 A11

FSBKSEL[1] 27 BS1
FSBKSEL[0] 26 BS0
FSCLK- 46 CLK
FSCLK+ 45 CLK
FSCKE 44 CKE

R732 220(J) NOT MOUNT
R733 220(J) NOT MOUNT

/FSCS[0] 24 CS
/FSRAS 23 RAS
/FSCAS 22 CAS
/FSWE 21 WE

R720 33(J) FSDQM[0] 20 LDM
R721 33(J) FSDQM[1] 47 UDM
R722 33(J) FSDQS[0] 16 LDQS
R723 33(J) FSDQS[1] 51 UDQS

R724 33(J) FSDQM[2] 20 LDM
R725 33(J) FSDQM[3] 47 UDM
R726 33(J) FSDQS[2] 16 LDQS
R727 33(J) FSDQS[3] 51 UDQS

14 NC
17 NC
19 NC
25 NC
FSADDR[12] 42 NC
43 NC
50 NC
53 NC

DQ0 2 1 [RMX4A] RM711 33(J) 8 FSDATA[0]
DQ1 4 2 7 FSDATA[1]
DQ2 5 3 6 FSDATA[2]
DQ3 7 4 5 FSDATA[3]
DQ4 8 1 [RMX4A] RM712 33(J) 8 FSDATA[4]
DQ5 10 2 7 FSDATA[5]
DQ6 11 3 6 FSDATA[6]
DQ7 13 4 5 FSDATA[7]
DQ8 54 1 [RMX4A] RM713 33(J) 8 FSDATA[8]
DQ9 56 2 7 FSDATA[9]
DQ10 57 3 6 FSDATA[10]
DQ11 59 4 5 FSDATA[11]
DQ12 60 1 [RMX4A] RM714 33(J) 8 FSDATA[12]
DQ13 62 2 7 FSDATA[13]
DQ14 63 3 6 FSDATA[14]
DQ15 65 4 5 FSDATA[15]

DQ0 2 1 [RMX4A] RM715 33(J) 8 FSDATA[16]
DQ1 4 2 7 FSDATA[17]
DQ2 5 3 6 FSDATA[18]
DQ3 7 4 5 FSDATA[19]
DQ4 8 1 [RMX4A] RM716 33(J) 8 FSDATA[20]
DQ5 10 2 7 FSDATA[21]
DQ6 11 3 6 FSDATA[22]
DQ7 13 4 5 FSDATA[23]
DQ8 54 1 [RMX4A] RM717 33(J) 8 FSDATA[24]
DQ9 56 2 7 FSDATA[25]
DQ10 57 3 6 FSDATA[26]
DQ11 59 4 5 FSDATA[27]
DQ12 60 1 [RMX4A] RM718 33(J) 8 FSDATA[28]
DQ13 62 2 7 FSDATA[29]
DQ14 63 3 6 FSDATA[30]
DQ15 65 4 5 FSDATA[31]

+2.5V_DDR
FSVREF

C774 100nF(K)
C775 100nF(K)
C776 100nF(K)
C777 100nF(K)
C778 100nF(K)
C779 100nF(K)
C780 100nF(K)

C781 100nF(K)
C782 100nF(K)
C783 100nF(K)
C784 100nF(K)
C785 100nF(K)
C786 100nF(K)
C787 100nF(K)

[VDDQ] 3 9 15 55 61
[VDD] 1 18 33
[VREF] 49
[VSSQ] 6 12 52 58 64
[VSS] 34 48 66

GND

32WL56P/37WL56P
SIGNAL
DDR SDRAM

SH. NO.
703

/FSCAS. /FSCS[0-1]. /FSRAS. /FSWE. FSADDR[0-12]. FSBKSEL[0-1]. FSCKE. FSCLK+. FSCLK-. FSDATA[0-31]. FSDQM[0-3]. FSDQS[0-3]

+2.5V_DDR

R9220 10K(F) MOUNT

REG. [L2995] IC703 LP2995MX

VDDQ VREF VSENSE NC VTT [AVIN] [PVIN] [GND]

W9116

FSVREF

C773 22uF(K) 4V MOUNT

C788 1uF(K) 10V

C789 220uF(M) [CP] 16V

C790 10nF(K)

R9221 10K(F) MOUNT

GND

C791 100nF(K)

C792 100nF(K) C793 100nF(K) C795 100nF(K) C797 100nF(K) C799 100nF(K) C7001 100nF(K) C7003 100nF(K) C7004 100nF(K) C7005 100nF(K) C7006 100nF(K)

[RMX4A] RM719 RM720 RM721 RM723 RM725 RM727 RM729 RM730 RM731 RM732 RM733

150(J)

FSDATA[31] FSDATA[30] FSDATA[29] FSDATA[28] FSDATA[27] FSDATA[26] FSDATA[25] FSDATA[24] FSDATA[23] FSDATA[22] FSDATA[21] FSDATA[20] FSDATA[19] FSDATA[18] FSDATA[17] FSDATA[16] FSDATA[15] FSDATA[14] FSDATA[13] FSDATA[12] FSDATA[11] FSDATA[10] FSDATA[9] FSDATA[8] FSDATA[7] FSDATA[6] FSDATA[5] FSDATA[4] FSDATA[3] FSDATA[2] FSDATA[1] FSDATA[0] FSADDR[10] FSADDR[11] FSADDR[4] FSADDR[9] FSADDR[12] FSADDR[5] FSADDR[6] FSADDR[7] FSADDR[8] FSADDR[0] FSADDR[1] FSADDR[2] FSADDR[3]

/FSBAS /FSCAS /FSWE /FSCS[1] /FSCS[0] FSBKSEL[0] FSBKSEL[1] FSDQS[1] FSDQM[1] FSDQM[0] FSDQS[0] FSDQS[3] FSDQM[3] FSDQM[2] FSDQS[2] FSCLK- FSCLK+ FSCKE

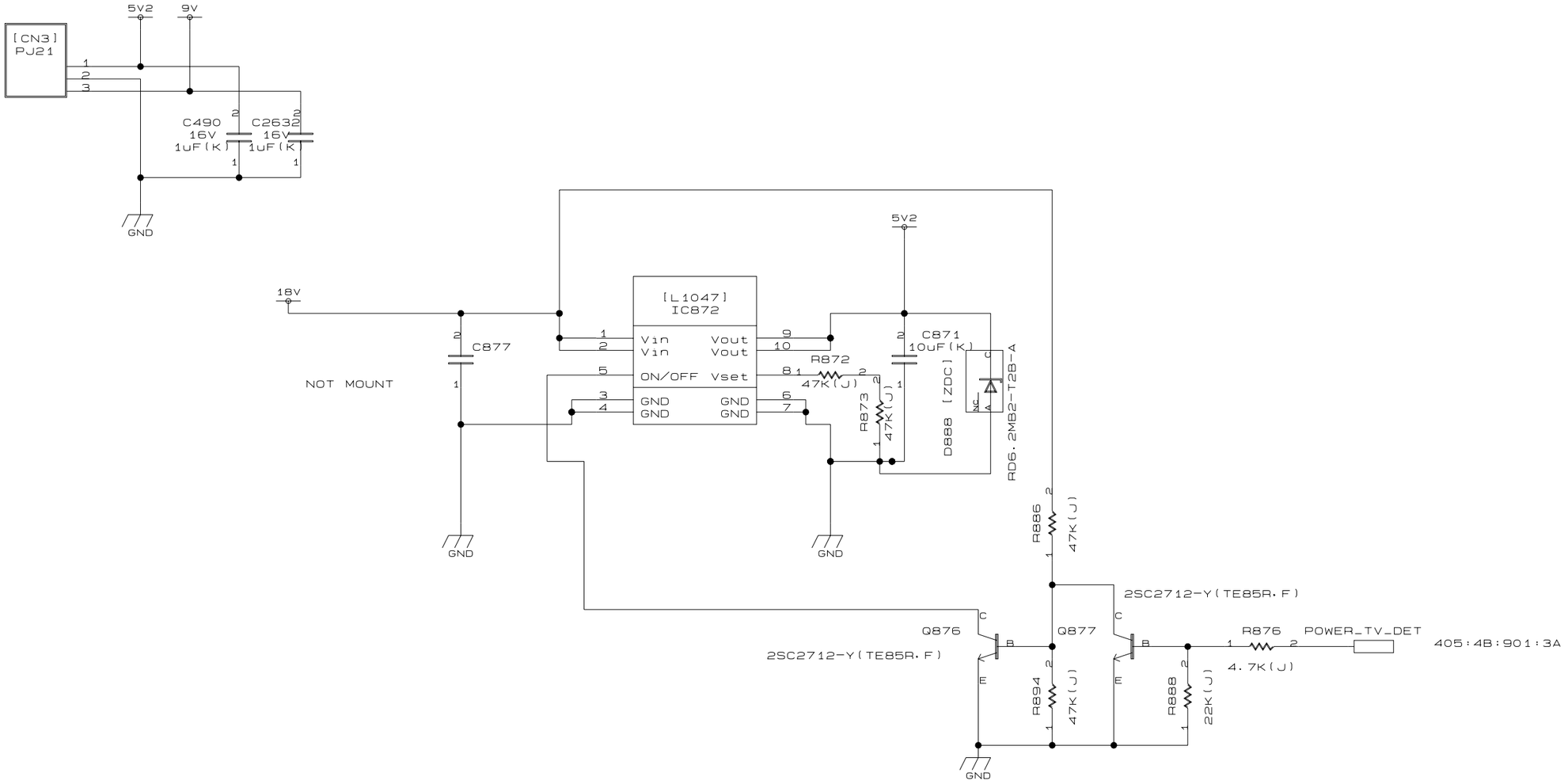
RM722 RM724 RM726 RM728

R728 150(J) R729 150(J) R730 150(J)

C794 100nF(K) C796 100nF(K) C798 100nF(K) C7000 100nF(K) C7002 100nF(K)

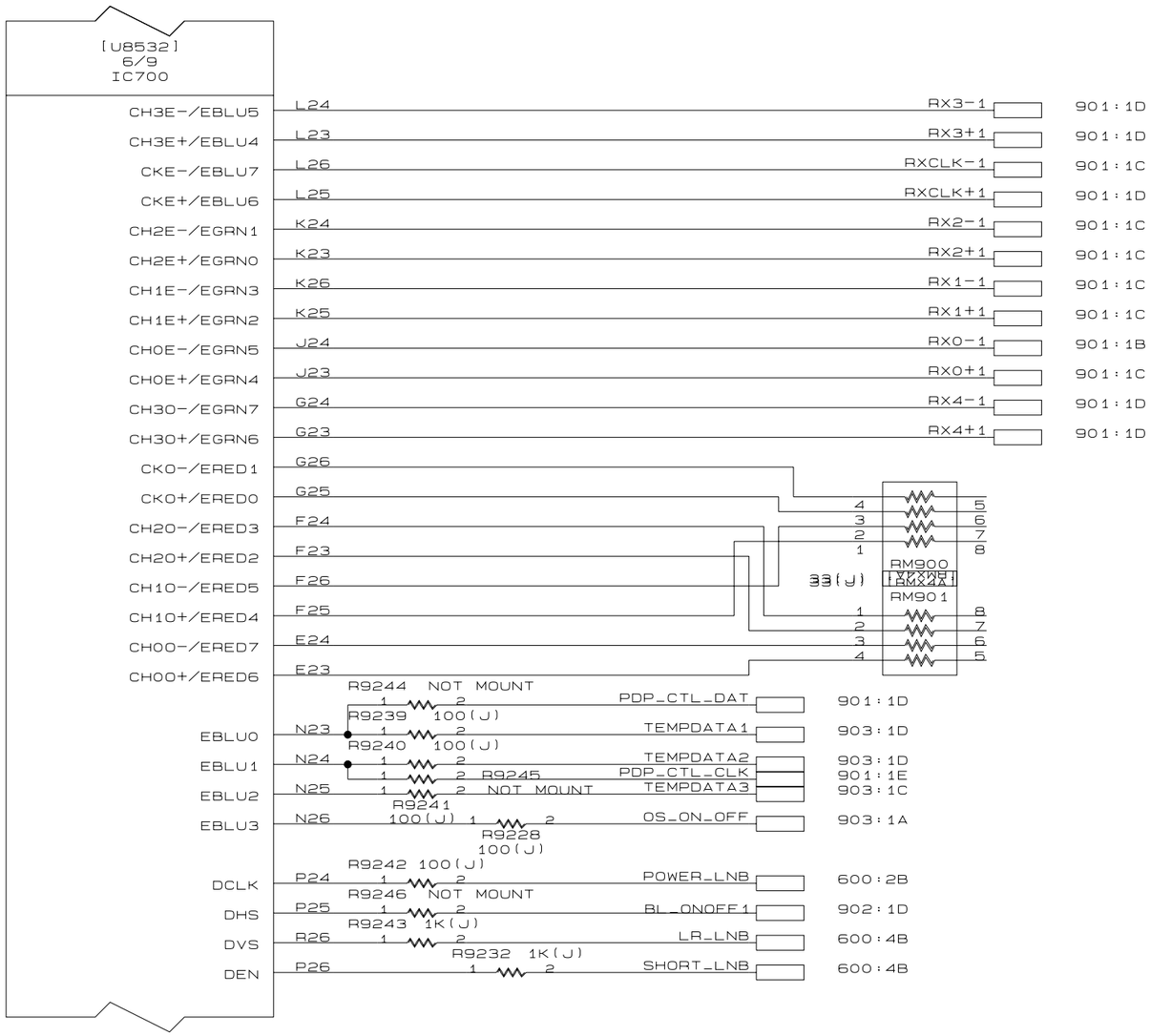
32WL56P/37WL56P
SIGNAL
DDR TERMINATION

SH. NO. 704



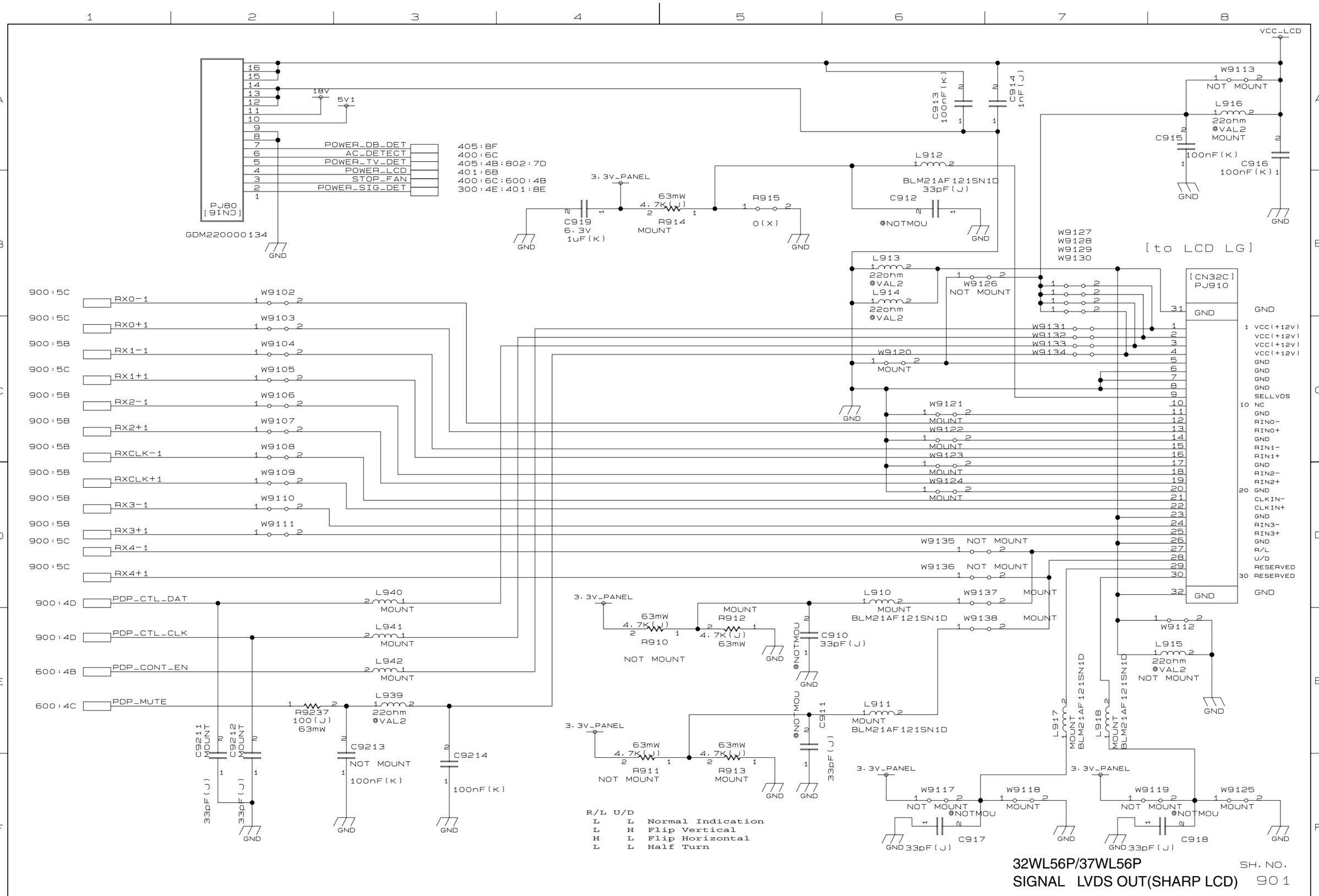

32WL56P/37WL56P
SIGNAL
DCDC CONV.

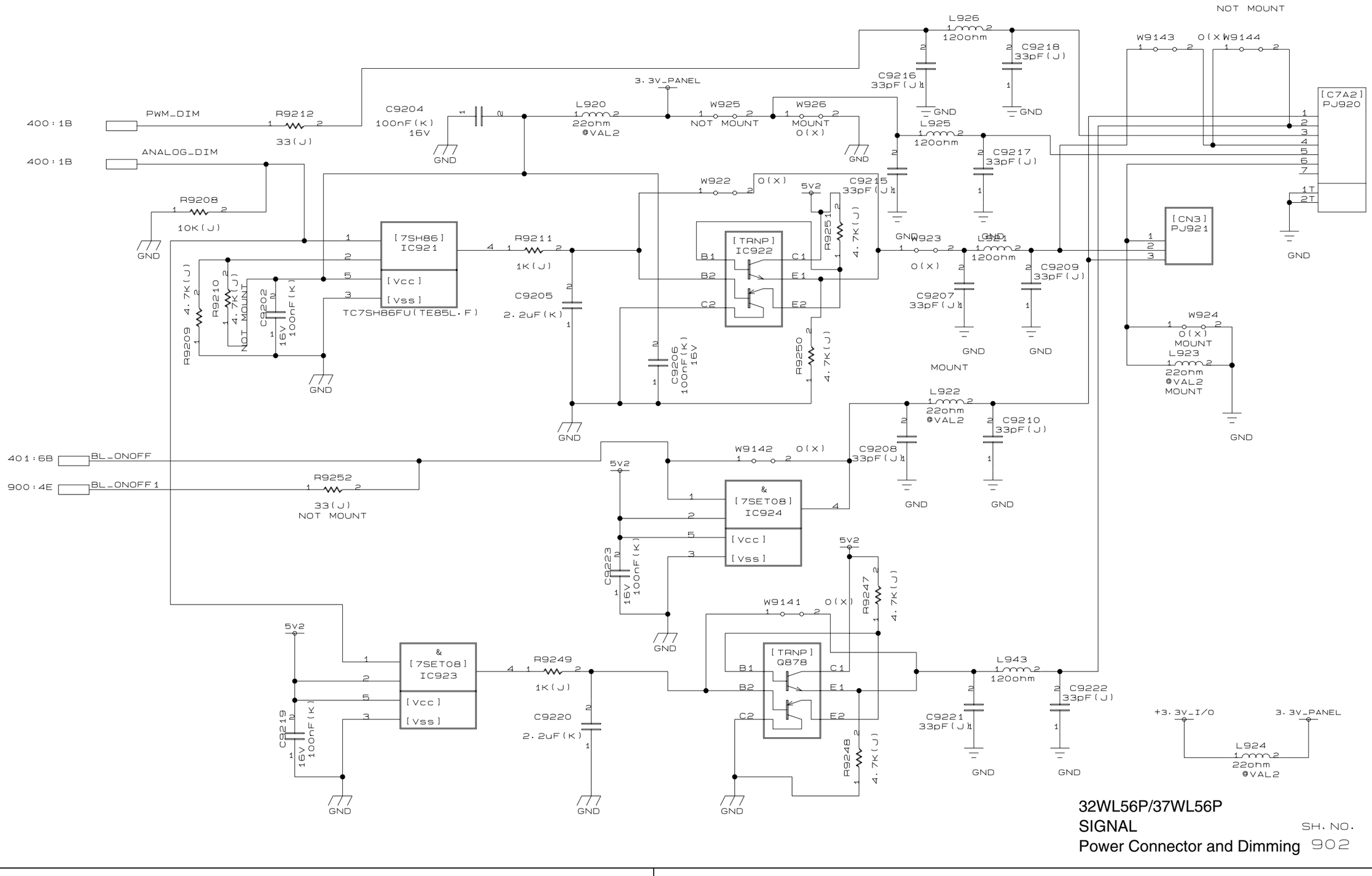
SH. NO.
802




32WL56P/37WL56P
SIGNAL
LVDS OUT

SH. NO.
900

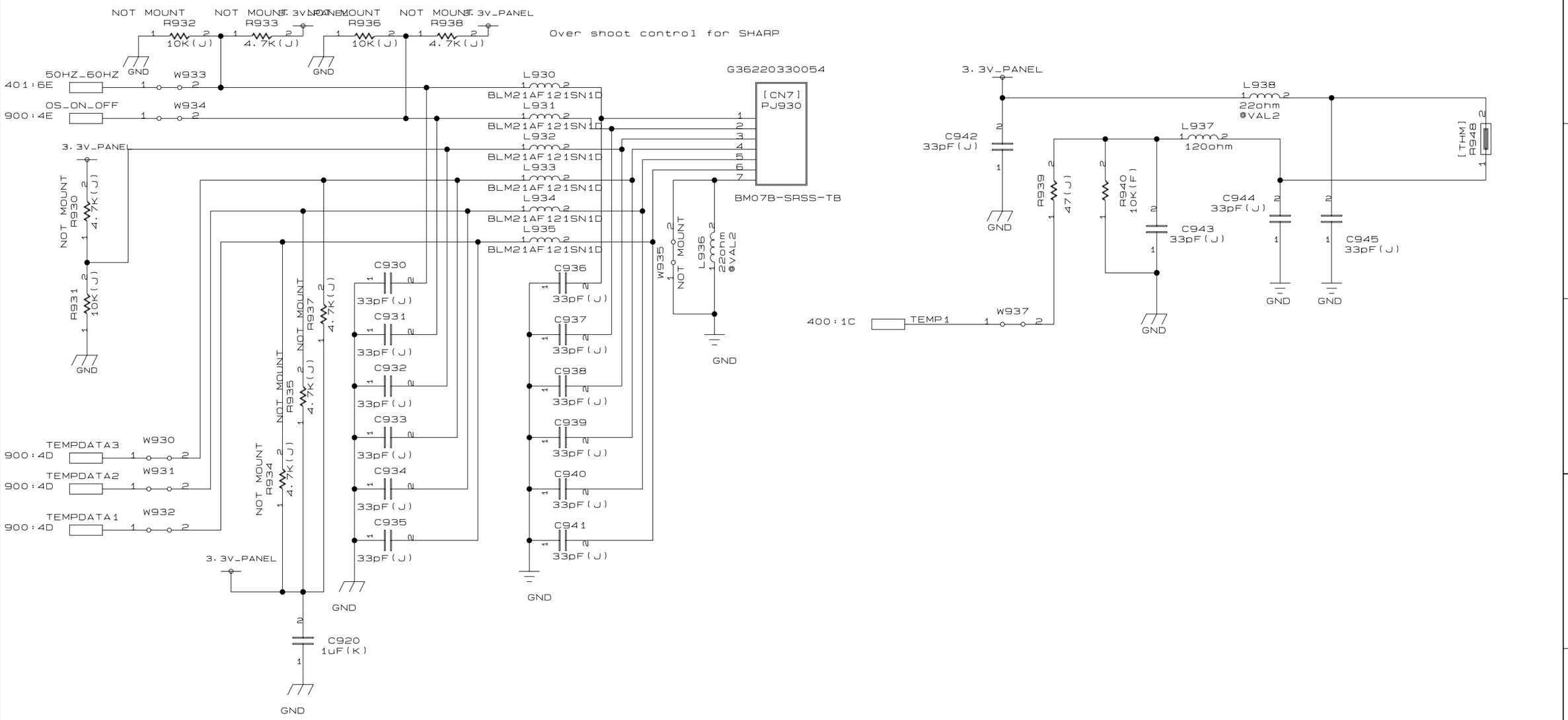

PJ80 [CN16]
GDM220000134
POWER_DB_DET
AC_DETECT
POWER_TV_DET
POWER_LCD
STOP_FAN
POWER_SIG_DET
405:8F
400:6C
405:4B:802:7D
401:6B
400:6C:600:4B
300:4E:401:8E
18V
5V1
3.3V_PANEL
C919 6.3V 1uF(K)
R914 MOUNT
63mW 4.7K(J)
R915 0(X)
C913 100nF(K)
C914 1nF(J)
L912 BLM21AF121SN1D
C912 @NOTMOU 33pF(J)
VCC_LCD
W9113 NOT MOUNT
L916 22ohm @VAL2 MOUNT
C915 100nF(K)
C916 100nF(K)
W9127 W9128 W9129 W9130
[to LCD LG]
L913 22ohm @VAL2
L914 22ohm @VAL2
W9126 NOT MOUNT
W9120 MOUNT
W9121 MOUNT
W9122 MOUNT
W9123 MOUNT
W9124 MOUNT
W9131 W9132 W9133 W9134
[CN32C] PJ910
GND
VCC(+12V)
SELLVDS
NC
RIN0- RIN0+ RIN1- RIN1+ RIN2- RIN2+
CLKIN- CLKIN+
RIN3- RIN3+
R/L
U/D
RESERVED
900:5C RX0-1 W9102
RX0+1 W9103
RX1-1 W9104
RX1+1 W9105
RX2-1 W9106
RX2+1 W9107
RXCLK-1 W9108
RXCLK+1 W9109
RX3-1 W9110
RX3+1 W9111
RX4-1
RX4+1
900:4D PDP_CTL_DAT L940 MOUNT
PDP_CTL_CLK L941 MOUNT
600:4B PDP_CONT_EN L942 MOUNT
600:4C PDP_MUTE R9237 100(J) 63mW L939 22ohm @VAL2
C9211 MOUNT 33pF(J)
C9212 MOUNT 33pF(J)
C9213 NOT MOUNT 100nF(K)
C9214 100nF(K)
W9135 NOT MOUNT
W9136 NOT MOUNT
W9137 MOUNT
W9138 MOUNT
L910 MOUNT BLM21AF121SN1D
L911 MOUNT BLM21AF121SN1D
R910 NOT MOUNT
R912 MOUNT 4.7K(J) 63mW
C910 @NOTMOU 33pF(J)
R911 NOT MOUNT 4.7K(J) 63mW
R913 MOUNT 4.7K(J) 63mW
C911 @NOTMOU 33pF(J)
W9112
L915 22ohm @VAL2 NOT MOUNT
L917 MOUNT BLM21AF121SN1D
L918 MOUNT BLM21AF121SN1D
W9117 NOT MOUNT
W9118 MOUNT
W9119 NOT MOUNT
W9125 MOUNT
C917 @NOTMOU 33pF(J)
C918 @NOTMOU 33pF(J)
R/L U/D
L L Normal Indication
L H Flip Vertical
H L Flip Horizontal
L L Half Turn
32WL56P/37WL56P
SIGNAL LVDS OUT(SHARP LCD)
SH. NO. 901




32WL56P/37WL56P

SIGNAL SH. NO.

Power Connector and Dimming 902




32WL56P/37WL56P
SIGNAL
LVDS Power and Others

SH. NO.
903